



AIRBORNE MEASUREMENTS OF VOR/LOCALIZER SIGNAL STRENGTH AND DESIRED TO UNDESIRED SIGNAL RATIOS

Volume I

VOR and Localizer Free Space Interactions Chickasha, Oklahoma

> Robert E. Everhart Spectrum Management Staff



November 1975 Final Report

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DESCRIPTION

- 1. GENERAL. The tests were divided into three phases. Phase I was conducted with a portable VOR located 40 nautical miles from the Chickasha, Oklahoma, localizer on the centerline of the front course (See Appendix Fig. 1). The VOR was designated the desired station and recordings were made of the VOR and localizer (LOC) signals as received by the Flight Inspection aircraft flying TO and FROM the VOR at various altitudes. For Phase II, the VOR was located 25 nautical miles from the localizer on the centerline of the front course. The localizer was designated the desired station and the front course signal was recorded at various altitudes. For Phase III, the VOR was located 25 nautical miles from the localizer on the centerline of the front course. The VOR was designated the desired station and recordings were made flying TO the VOR from the localizer.
- 2. PHASE I. Phase I tests were conducted under the following conditions:
 - a. Navaid Facilities (See Appendix Figs 2-6): Chickasha Localizer (non-commissioned FAA Training Facility) was maintained on 110.5 MHz and a log of all facility meter readings (power output, etc.) was maintained. A portable VOR was obtained from the Southwest Region and maintained at 110.6 MHz. During Phase I, the VOR was operated on commercial power: engine-generator power was used for Phases II and III.
 - b. Flight Inspection Aircraft: The flight inspection aircraft (DC-3, N-67) was configured and maintained as follows: (See Appendix Figs. 7-9)
 - (1) Two each airline quality Navaid receivers (100 kHz) were calibrated and installed in the flight inspection aircraft as the number 1 and 4 receivers. Normal flight inspection parameters were recorded (flag, crosspointer, AGC, and ident).
 - (2) One general aviation Navaid receiver (100 kHz) was rented "in new off-the-shelf condition," shop checked for frequency response (See Appendis Figs. 10 & 11), and installed in the flight inspection aircraft, as the number two receiver, without adjustments. Only flag and crosspointer currents were recorded on this receiver.
 - (3) A second 100 kHz general aviation Navaid receiver (different manufacturer) was rented "in new off-the-shelf condition," shop checked for frequency response, and installed in the flight inspection aircraft, as the number three receiver, without adjustments.

 Flag and crosspointer currents were recorded on this receiver also.

- (4) Standard flight inspection signal conditioning and recording equipment were used with the following exceptions:
 - (a) The recording format on the CEC Model 5-119P8 recorder was rearranged to accommodate the additional receivers.
 - (b) Special circuitry was installed to condition the number two and three receiver signals for recording.
 - (c) Special attenuators were used to prevent saturation of the receiver during over-flight of the undesired facility.
 - (d) The flight inspection receivers were checked in the aircraft with a shop-standard signal before and after each flight to assure that the data collected was valid.
- (5) Flight tests were conducted as follows:
 - (a) The ground facilities were tested in accordance with Commissioning Criteria to determine suitability for the program.
 - (b) Recordings were made TO and FROM the VOR facility at altitudes of 1,000, 2,000, 3,000, 4,000, 5,000, 10,000 and 15,000 feet above ground level. On TO flights, the recording was started five miles before passing over the localizer and was stopped on passing over the VOR. On FROM flights, the recording was started over the VOR and was stopped five miles after passing over the localizer. A reference recording was made, at each altitude, with the undesired facility off for comparison with the test recording made with the undersired facility on.
 - (c) Useable signal on each of the receivers is defined as the point where the flag is just peeping. This point is 240 u/a for the No. 1 and No. 4 receivers, 20 u/a for the No. 2 receiver and 50 u/a for receiver No. 3.
 - (d) Interference can be identified by examining the crosspointer (CP) and flag readings for receivers 1, 2 and 3. The interference results in a reduction in the flag current and/or a deviation in the crosspointer. An example of cross pointer interference can be seen in Phase III (See page 62). The interference can be found by making comparisons between the test and reference data. In Phase I there is an example of low signal strength and not interference (See page 18). By making comparison of the reference and test flights, one can determine whether abnormal readings are the result of interference or just low receiver input.

- (e) Receivers 1, 2, and 3 were always tuned to the desired facility and No. 4 was tuned to the undesired facility.
- 3. PHASE II. Phase II tests were conducted under the following conditions:
 - a. Navaid Facilities: The VOR was located 25 nautical miles from the localizer on the centerline of the front course. The facilities were maintained and monitored the same as in Phase I, except for the facility power requirements. The portable engine-generator was used for both Phase II and Phase III VOR facility power.
 - b. Flight Inspection Aircraft: The flight inspection aircraft was configured the same as in Phase I. The localizer was designated as the desired station and the front course signal was recorded at 500, 1,000, 2,000, 3,000, 4,000 5,000, 10,000 and 15,000 feet. All other conditions were as in Phase I.
- 4. PHASE III. Phase III tests were conducted under the following conditions:
 - a. Navaid Facilities: The facilities were located and maintained as in Phase II.
 - b. Flight Inspection Aircraft: The flight inspection aircraft was configured the same as in Phase I. The VOR was designated as the desired station and the TO courses of the VOR were recorded at the altitudes of Phase II in accordance with the procedure stated in Phase I. All other conditions were as stated in Phase I.

5. SUPPLEMENTAL FLIGHT DATA

- a. A special flight at 2000 feet, under Phase III conditions, was conducted in the DC-3 with the VOR facility frequency changed to 110.4 MHz (lower adjacent channel). When the frequency characteristics of the general aviation receivers were plotted, it was noted that both response curves were slightly offset below the frequency selected. This flight was made to check the susceptibility of adjacent channel interference with receivers aligned in this manner. The flight data is presented on pages 65 thru 68
- b. A special flight in a Cessna Skyhawk (172) was conducted to check the effect of adjacent channel interference as seen by a third type of General Aviation Navaid receiver installed in that class of airplane. The results of the flight are found on page 69 of this report.

6. GRAPHICAL REPRESENTATION OF SIGNAL STRENGTHS AND D/U RATIOS

- (a) The tabular results from all phases were considered in developing some typical signal strength and signal ratio curves. First of all, like direction/like altitude readings were averaged. The the averages were adjusted to correct for internal aircraft losses. They thus represent the signal level at the output of the aircraft antenna. The average TO readings were plotted for each of eight altitudes. The FROM readings, while not plotted, averaged 5.5 db lower than the TO readings. See Appendix B & C.
- (b) The desired to undesired (D/U) signal ratios were calculated by considering the No. 1 receiver input as the desired signal and the No. 4 receiver input as the undesired signal. As might be expected, the D/U ratio at any given point in space is different for the TO and FROM directions of flight. The lower of the two D/U ratios (VOR FROM/Localizer TO) were plotted for 8 altitudes and two facility separations. These curves were plotted to show how the D/U ratio varies as an aircraft nears and over-files an undesired station. As a result, only negative D/U are plotted. See Appendix D & E.

7. DATA PROCESSING

The flight recordings were analyzed by the National Flight Inspection Division, AFS-600, using a Model Oscar K. Bensen Lehner data reader coupled with an IBM, Model 24 card punch. The punch cards were then processed by the Data Services Division, AAC-300. The AGC levels were converted to micro-volt input levels for receivers No. 1 and No. 4.

8. TABULATION OF PLIGHT DATA-PHASE I

FLT	PURPOSE	- REFERENCE	PHASE I	ALT FL	N 1000	FLT DIRE	CTION - TO	DESIRAB	LE - VOR	
	R	CVR 1	•	RCV	R 2	RCV	7R 3	RC	VR 4	
DIST	CP	uv	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1	1.9L	3396	340	1.4L	190	1.4L	250			
2	1.6L	3396	360	1.1L	190	1.4L	270			
3	1.7L	3396	360	1.1L	190	1.5L	270			
4	1.8L	3396	350	1.3L	190	1,6L	260			
5	1.7L	3396	350	1.2L	200	1.51	240			
6	1.6L	1698	340	1.0L	190	1.4L	240			
7	1.4L	1698	340	.9L	190	1.2L	230			
8	1.5L	1698	340	.9L	190	1,2L	220			
9	1.5L	1316	330	.7L	190	1.0L	2.0			
10	1.1L 1.3L	934 552	330 330	.5L	180	.9L	210			
12	1.5L	552 552	340	.7L	180	.9L 1.0L	210			
13	1.5L	127	330	.8L	180 180	1.0L 1.2L	200			
14	1.5L	127	330	.7L	180	.9L	200			
15	1.2L	127	330	.5L	180	.7L	200			
16	1,2L	85	330	.4L	180	,9L	200			
17	.9L	76	330	.4L	180	, 8L	200			
18	.9L	68	330	.2L	170	.7L	200			
19	.7L	59	340	, 1L	180	,5L	200			
20	,6L	51	330	, OR	180	4L	190			
21	.7L	34	330	, OR	170	,5L	190			
22	.9L	34	330	.OR	170	,5L	190			
23	.9L	27	330	.OR	170	.6L	190			
24	1.0L	22	330	.OR	160	.6L	180			
25	.7L	20	330_	.1R	160	.5L	180			
26	1.0L	17	330	, OR	160	.6L	180			
27	1.2L	14	330	.OR	150	.7L	180			
23	1.1L	14	330	, OR	150	.8L	170			
29	1.2L	12	330	. 1R	150	.8L	170			
30	1.1L	10	320	,1R	140	.6L	170			
31	1,1L	10	330	. 1R	140	,6L	160			
32	1.1L	7	320	.OR	130	.8L	160			
33 34	1.3L 1.3L	7 7	310 300	.1R .OR	120 110	"8L "6L	150			
		7	300		100		140 140			
35 36	1,2L 1,2L		300	.2R	90	.7L .7L	120			
37	1.11	5	280	.1R	90	.4L	110			
38	1.4L	5	280	. 1R	80	.7L	110			
39	.7L	3	280	.4R	70	.5L	100			
40	.8L	5	260	.OR	70	.7L	90			
41	.5L	3	230	.3R	50	.5L	90			
42	,OR	3	220	.2R	40	.3L	70			
43	.OR	3	170	.OR	20	.3L	70			
44	, OR	3	170	. 1R	10	.OR	60			
45	.OR	3	160	.OR	10	.2L	50			

		REFERENCE	PHASE I		N 1000			DESTRAB	LE - VOR
	RCV	'R 1		RCV	7E 2	RCV	7R 3	RC	VR 4
DIST	CP	uv	FLAG	CF	FLAG	CP	FLAG	עע	FLAG
1	1.2L	5095	360	.7L	200	.2R	200	13	40
2	1.0L	3396	360	.4L	200	.6R	190	13	30
3	.8L	5095	370	.5L	210	.7R	210	13	40
4	.7L	3396	360	.3L	210	,8R	190	13	70
5	.5L	3396	370	.OR	210	.6R	190	13	70
6	.7L	1698	370	.1L	200	.8R	200	13	70
7	.3L	3396	370	.OR	200	.9R	190	13	100
8	.11.	1098	360	.2R	200	1.0R	190	13	120
9	.1L	1194	370	.1R	200	1.3R	190	13	140
10	.1L	674	370	.3R	200	1.1R	190	13	160
11	.21	170	360	.2R	190	1.3R	190	13	190
12	.OR	170	370	.3R	190	1.4R	190	13	190
13	.OR	170	360	,4R	190	1.2R	180	13	230
14	.OR	143	350	.3R	190	1.1R	180	13	250
15	.2R	143	350	.6R	190	1.3R	170	13	280
16	.2R	143	360	.5R	190	1.3R	170	13	320
17	.1R	85	360	.5R	200	1.2R	180	26	350
18	.OR	75	370	.6R	190	1.2R	180	26	370
19	.2R	75	360	.6R	190	1.2R	170	26	380
20	.OR	65	350	.6R	190	1.2R	170	38	380
21	.2L	42	350	.5R	180	.9R	180	38	390
22	.3L	34	360	.3R	190	1.0R	16.0	51	390
23	.3L	34	350	.5R	180	.9R	160	51	390
24	.3L	25	370	.6R	180	.7R	160	51	400
25	.3L	24	350	.5R	170	.8R	160	64	400
26	.3L	19	350	.5R	170	.7R	150	77	390
27	.3L	15	350	.6R	170	.9R	160	103	400
28	.3L	15	370	.7R	170	.8R	150	115	390
29	.3L	14	360	.9R	170	.9R	150	128	390
30	.3L	10	360	.8R	160	.4R	160	180	400
31	.3L	12	360	.7R	150	.5R	150	257	400
32	.1L	8	350	1.0R	140	.6R	130	257	400
33	.4L	8	340	.9R	130	.3R	100	423	390
34	.2L	7	330	1.0R	120	.1R	90	539	390
35	.1L	7	320	1.0R	120	.3R	50	641	400
36	.2L	7	330	1.1R	100	.2R	30	1283	400
37	.1L	5	300	1.2R	60	.1R	0	5092	400
38	.4R	5	280	1.2R	40	.OR	20	9016	400
39	.4R	5	240	.OR	0	.OR	0	12825	390
40	.5R	5	80	.1R	10	.OR	0	12825	430
41	.3R	5	130	.1R	10	.1R	10	6413	380
42	.1R	3	180	.OR	0	.OR	0	12825	370
43	.4R	3	240	.8R	10	.OR	0	9016	370
44	.3R	2	190	.4R	0	.1R	10	9016	380
45	.5R	2	170	.4R	40	.2R	10	5092	390

FLT	PURPOSE	- REFERENCE	PHASE I	ALT FL	N 1000	FLT DIE	RECTION - FROM	DESTRAB	LE - VOR
	RO	VR 1	•	RCVI	R 2	RC	evr 3	RC	VR 4
DIST	CP	σν	FLAG	CP	FLAG	CP	FLAG	UV	FLAG
1	.5R	3396	320	.6R	190	.3R	210		
2	.OR	3396	340	.OR	190	.OR	230		
3	.1R	3396	350	.4R	190	.OR	230		
4	.OR	3396	330	.OR	190	.2L	220		
5_	.7L	1698	330	,3L	190	.7L	210		
6	1.0L	1316	. 330	.5L	190	.9L	200		
7	.8L	934	330	.3L	190	.7L	200		
8	.8L	934	330	.2L	190	.6L	190		
9	.9L	552	320	.1L	180	,7L	190		
10	.8L	170	320	, OR	180	.6L	190	·	
11	.9L	127	320	.1L	180	.8L	190		
12	1.3L	76	330	.5L	180	1.0L	180		
13	1.0L	76	330	.2L	180	.7L	190		
14	1.2L	76	310	.4L	180	.8L	180 180		
15	1.5L	59	320	.5L	170 170	1.0L .9L	180		
16	1.5L	51	320 320	.3L	170	.5L	190		
17 18	.9L	42 32	320	.OR	170	.4L	180		
19	.4L	32	330	.1R .3R	170	.3L	190		
20	.6L	27	330	.3R	170	.4L	170		
21	.6L	17	330	.1R	160	.5L	170		
22	.8L	15	330	.3R	160	.6L	180		
23	.5L	14	330	.3R	160	.5L	170		
24	.7L	12	330	.3R	150	.6L	170		
25	.6L	10	330	.3R	140	.7L	160		
26	.7L	8	320	.3R	140	.4L	160		
27	.9L	8	310	.2R	130	.8L	150		
28	1.2L	7	300	.3R	120	.6L	140		
29	1.0L	7	300	.3R	120	.7L	150		
30	1.1L	7	300	IR	110	.6L	140		
31	1.1L	5	290	-2R	100	.7L	120		•
32	1.2L	5	290	.1R	90	.7L	110		
33	1.9L	5	290	.2R	80	.8L	100		
34	1.1L	3	270	.4R	70	.6L	100		
35	<u>.9L</u>	3	270	5R	60	.4L	90		
36	.7L	3	240	. 1R	50	.5L	70		
37	1.1L	3	220	;.1R	40	.3L	60		
38	.6L	3	240	.4R	50 30	.5L	60 60		
39	.5L	3 3	210	.1R	10	.4L	40		
40	8 <u>L</u>	2	190 150	OR OR	10	.3L .4L	30		
41 42	.6L .OR	2	100	.OR	10	.OR	20		
43	.OR	2	70	.OR	0	.OR	0		
44	.OR	3	10	.OR	20	OR	Ö		
45	.3R	2	60	.OR	50	.OR	Ŏ		
43	, , , ,		00	, UK		.01	· · · · · · · · · · · · · · · · · · ·		

FLT	PURPOSE	- TEST	PHASE I	ALT FI	N 1000	FLT DIRE	CTION - FROM	DESTRAB	LE - VOR	
	RO	CVR 1		RCV	/R 2	RCV	R 3	RC	VR 4	
DIST	CP	υv	FLAG	CP	FLAG	CP	FLAG	υv	FLAG	
1	.4L	5095	350	.OR	190	1.0R	190	13	40	
2	.5L	5095	360	.2L	200	.9R	190	13	50	
3	.7L	1698	370	.5L	210	.7R	210	13	70	
4	.5L	3396	370	,2L	200	.7R	190	13	100	
5	.6L	1698	370	.2L	210	.7R	190	13	110	
. 6	.4L	1194	370	,1L	200	.9R	190	13	140	
7	.1L	1194	370	.1R	200	1.1R	19 0	13 ,	190	
8	.21	674	360	.2R	190 ·	1.2R	180	13 '	230	
9	.2L	170	350	.2R	200	1.1R	180	13	260	
10	,3L	114	360	,2R	190	.9R	180	13	260	
11	.OR	- 85	390	.2R	190	1.2R	180	13	270	
12	.1R	85	360	.5R	190	1.2R	180	13	300	
13	.1L	75	360	.2R	190	.9R	180	26	330	
14	.1R	65	370	,4R	190	1.2R	170	26	370	
15	.1R	75	350	,5R	190	1.2R	170	26	370	
16	.OR	65	350	.5R	190	1.1R	170	38	390	
17	.OR	42	350	.6R	180	1.3R	170	38 51	380	
18	.2R	31	350	.6R	180	1.3R	160 170	64	390 370	
19	. 1R	31	350	.8R .7R	180 180	1.1R 1.3R	160	77	380	
20	OR	22 19	350 350	.8R	170	1.2R	150	90	370	
21 22	.OR	15	340	.8R	180	1.3R	150	103	370	
23	.1k	15	350	.7R	160	1.0R	150	128	370	
24	. OR	14	350	.6R	170	.9R	150	128	380	
25	.1L	12	340	.5R	160	.7R	150	141	390	
26	.1L	10	340	. 8R	150	.6R	150	192	400	
27	.3L	8	340	. 7R	140	.7R	130	231	390	
28	.OR	8	340	1.1R	130	.9R	120	295	390	
29	.1L	7	330	1.0R	130	. 4R	110	321	370	
30	.1R	77	330	1.1R	120	5R	100	423	370	
31	.2L	7	330	1.1R	110	.2R	80	641	380	
32	.3L	7	310	1.OR	100	.2R	60	641	380	
33	.OR	5	310	1.OR	100	.4R	50	1283	410	
34	.2R	5	320	1.1R	60	.3R	30	962	400	
35	3R	5	300	1.1R	50	,3R	30	1283	400	
36	.2R	5	290	1.3R	70	.5R	30	12825	380	
37	.2R	3	250	,9R	10	.1R	0	25650	390	
38	.4R	3	230	.2R	0	.OR	0	25650	380	
39	.4R	3	140	.OR	0	.OR	0	12825	400	
40	,7R	3	70	.OR	0	.0R	0	5092	380	
41	.8R	3	130	. 1R	10	.OR	10	12825	380	
42	1.0R	2	180	.2R	20	. 1R	10	9016	410	
43	1.0R	2	160	.1R	10	.1R	10	12825	380	
44	.6R	2	160	.3R	10	. 1R	10	5902	390	
45	.4R	2	130	.2R	20	.2R	20	5902	400	

FLT	PURPOSE	- REFERENCE	PHASE I	ALT FL	N 2000	FLT DIR	ECTION - TO	DESIRAB	LE - VOR	
	RC	CVR 1	•	RCV	R 2	RC	/R 3	RC	VR 4	
DIST	CP	uv	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1	2.7L	5095	360	3.3L	210	1.2L	250			
2	.6R	5095	360	.3L	210	1.2R	230			
3	.6L	5095	360	1.2L	210	.4R	230			
4	.8L	50 9 5	370	1.5L	220	.2R	260			
5	.1L	3396	370	1,1L	220	.5R	240			
6	.OR	3396	360	.9L	220	.9R	240			
7	.OR	1698	360	.8L	220	.8R	230			
8	.4L	1698	350	1.2L	210	.4R	210			
9	.OR	1484	350	.9L	210	.7R	210			
_10	,4R	1484	350	.5L	210	1.1R	210			
11	. 5R	1255	350	.5L	210	1.OR	210			
12	.OR	1041	350	.9L	210	.5R	190			
13	.OR	827	350	.7L	210	.7R	190			
14	,5R	827	350	.3L	210	1.1R	190			
15	, OR	827	350	.6L	210	.6R	190			
16	, OR	613	340	.8L	210	.3R	190			
17	.OR	384	340	.6L	210	.5R	190			
18	.OR	384	340	.7L	210	.6R	190			
19	.OR	170	340	.6L	210	.6R	190			
20	.1R	143	340	.5L	200	4R	180			
21	.OR	114	340 340	· .5L	190	.5R	180			
23	.1R .OR	80	340	.5L	190	.6R	190			
24	. 2R	00	340	.5L .4L	200 200	.6R .6R	190			
25	.2R	80 , 73	340	.4L	200	.6R	180			
26	.2R	66	340	.3L	190	.6R	190			
27	.4R	61	340	.1L	190	.8R	190			
28	.6R	54	340	.OR	190	1.0R	180			
29	. 1R	49	340	.2L	200	.7R	180			
30	, OR	49	340	.4L	190	.4R	180			
31	.OR	34	330	.3L	190	,5R	180			
32	.2R	31	340	.1L	190	.7R	180			
33	.2R	31	340	OR	190	.8R	180			
34	.2R	29	340	.OR	190	8R	180			
35	.4R	25	340	.OR	190	1.0R	180			
36	.5R	24	340	.OR	190	.8R	180			
37	.6R	22	350	.2R	190	.8R	170			
38	.2R	19	340	.1R	180	.7R	170			
39	.2R	17	330	.1R	180	.6R	160			
40	.OR	15	330	.18	170	.5R	160			
41	.21	14	320	.OR	170	.3R	150			
42	.2L	14	320	.OR	160	.3R	160			
43	.OR	12	320	.2R	160	.3R	150		1	
44	.OR	10	310	.3R	150	.5R	140			
45	.OR	10	320	.2R	140	.4R	140			

FLT PU	RPOSE -	TEST	PHASE I	ALT FL	N 2000	FLT DIREC	TION - TO	DESIRAB	LE - VOR	
	RCV	R 1		RCV	'R 2	RCV	'R 3	RC	VR 4	
DIST	CP	UV	FLAG	CP	FLAG	CP	FLAG	עע	FLAG	
1	.4L	3396	360	1.9L	200	.1L	240	51	20	
2	.6R	5095	370	•1R	200	1.4R	220	51	40	
3	4R	5095	350	•OR	200	1.1R	220	51	30	
4	.7L	3396	360	1.5L	200	.3R	240	51	40	
5	.3L	5095	390	1.1L	200	.6R	240	51	40	
6	,7L	1698	350	1.6L	200	.3R	210	51	50	
7	.5L	1698	360	1.4L	210	.2R	210	51	80	
8	.5L	1698	340	1.3L	200	.3R	200	51	70	
9	.OR	3396	360	1.2L	200	.7R	200	51	100	
10	1.1R	1255	340	.3L	200	1.1R	210	51	130	
11	.7R	1484	360	.5L	210	1.2R	210	51	130	
12	.3R	1041	350	.7L	200	.9R	200	51	140	
13	.1R	1041	340	1.0L	200	.5R	190	51	160	
14	.or	827	350	1.3L	200	.4R	190	51	190	
15	.OR	827	35C	1.1L	200	.4R	190	51	220	
16	.11	827	340	1.0L	200	,6R	190	51	210	
17	.OR	613	350	1.0L	200	.6R	190	51	220	
18	.OR	170	330	1.OL	200	.5R	190	103	260	
19	.OR	170	340	.9L	200	.5R	190	103	280	
20	.3L	114	340	1.3L	200	.3R	180	103	310	
21	.3L	143	350	1.1L	200	.3R	180	103	330	
22	.1L	114	350	.9L	200	.4R	180	154	370	
23	.OR	114	350	.7L	200	.6R	180	205	360	
24	. 1R	85	350	.5L	200	.8R	180	205	370	
25	.1R	80	350	.7L	200	.7R	180	205	360	
26	,2R	73	350	.5L	190	.8R	180	257	370	
27	1R	66	330	.5L	200	.8R	170	359	370	
28	.3R	61	340	.2L	180	.8R	180	410	350	
29	.1R	54	330	.4L	200	.7R	170	462	370	
30	. OR	49	330	.4L	190	.7R	170	513	370	
31	. OR	49	330	.3L	190	· 7R	1/0	667	370	
32	.1R	42	340	.4L	190	.8R	160	770	360	
33	• OR	39	330	.3L	190	.6R	160	1026	350	
34	.OR	31	340	.OR	190	.3R	160	1693	360	
35	. OR	29	340	. lL	190	.OR	130	1693	350	
36	OR.	?5	340	.1L	180	.6L	90	3848	360	
37	.1R	22	340	.OR	170	.5L	30	5130	360	
38	.3R	19	330	.1R	160	.4L	20	20366	360	
39	.OR	15	310	.3R	110	1.2L	40 10	36064 36064	370	
40	. 1R	15	290	.6R	30	.4L	0	51300	390	
41	.5R	15	220	.9R	0	.OR		51300	360	
42	.4R	15	280	1.0R	50	-4R	0	36064	340	
43	.3R	12	300	.8R	60	.2L	20		350	
44	.3R	12	330	.4R	100	1.6L	60	5130	360	
45	.OR_	12	310	.3R	110	-2.7L	20	2565	360	

FLT I	PURPOSE	- REFERENCE	PHASE I	ALT FL	N 2000	FLT DIRE	CTION - FROM	DESIRABI	LE - VOR
	RC	VR 1	•	RCV	R 2	RCV	7R 3	RC1	7R 4
DIST	CP	υv	FLAG	CP	FLAG	CP	FLAG	υv	FLAG
1	6.3L	5095	350	6.0L	210	3.3L	220		
2	.4R	5095	350	.6L	210	1.1R	210		
3	1.1R	5095	360	.OR	210	1.5R	210		
4	.5L	3396	360	1.4L	210	.2R	230		
5	.5L	3396	_360	1.5L	220	,2R	230		
6	.OR	1698	360	1.2L	220	.5R	240		
7	.3L	1698	360	1.3L	220	.3R	220		
8	.3L	1255	360	1.2L	210	.4R	220		
9	.OR	1255	360	.9L	210	.7R	210		
10	.OR	1041	350	.9L	210	.7R	210		
11	.OR	1041	350	· .9L	210	.6R	210		
12	.OR	1041	340	.7L	210	.7R	190		
13	.8R	613	350 · 350	.2L	210	1.2R	190		
14	1.1R	613		.2R	210	1.7R	210		
15 16	1.1R .2R	384 170	340 340	.1R	210	1.5R	190		
17	. OR	143	330	.5L	210	.9R	190		
18	.OR	143	340	.7L	210 200	.5R	190 190		
19	.1R	114	340	.5L	210	.7R .6R	190		
20	. 1R	85	340	.42	190	.7R	190		
21	.3R	73	340	.2L	190	1.0R	190		
22	.3R	66	340	.3L	190	.9R	180		
23	.2R	61	340	.3L	190	.6R	180		
24	.3R	61	340	.2L	190	.8R	180		
25	.3R	54	340	.2L	190	.9R	180		
26	.2R	49	340	.2L	190	.7R	180		
27	.3R	48	330	.OR	190	1.0R	170		
28	.4R	48	340	.OR	190	.9R	170		
29	.5R	31	330	.OR	190	.8R	170		
30	4R	29	330	OR	190	1.0R	170		
31	.3R	27	330	.OR	190	.9R	170		
32	.2R	25	330	.OR	190	.7R	170		
33	.1R	24	340	.OR	190	.7R	170		
34	. 2R	22	330	.OR	190	.7R	170		
35	.3R	20	330	.1R	190	,9R	170		
36	. 2R	20	330	.OR	180	.7R	160		
37	.5R	17	330	.3R	180	.9R	160		
38	.3R	17 15	320 320	.2R	170	.9R	160		
39 40	.2R .2R	12	320	.1R .2R	170 150	.7R	150 140		
41	. 1R	10	320	.2R	150	.4R	140		
42	.1R	.8	310	.2R	140	.5R .5R	140		
42	.1R	8	310	. 4R	140	.5R	140		
44	.1R	ž	310	. 6R	130	.5R	130		
45	.1R	7	310	.4R	120	.5R	130		
	• 11			74.	140	, 3K	130		

FLT	PURPOSE	- TEST	PHASE I	ALT FL	N 2000	FLT DIRE	ECTION - FR	OM DESIRAB	LE - VOR	·
	R	CVR 1		RCV	R 2	RCV	7R 3	RC	VR 4	
DIST	CP	υv	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1	3.1L	1698	360	3.4L	210	1.7L	210	51	30	
2	.3R		350	.4L	200	1.1R	210	51	40	
3	.7L		360	1.5L	200	.3R	210	51	50	
4	1.0L		370	1.9L	210	3R	240	51	50	
5	.3R		370	.7L	210	1.OR	230	51	. 70	•
6	.3L		370	1.4L	210	.7R	230	31	70	
7	,1L		370	1.1L	210	.6R	230	51	120	
8	.OR		370	1.0L	200	.8R	210	51	160	
9	. 1R		350	1.OL	210	.7R	210	51	170	
10	1.0R	1255	360	.3L	210	1.4R	210	51	200	
11	1.3R	1041	360	.1L	200	1.7R	210	51	. 220	
12	,1R		340	.7L	210	1.OR	210	51	230	
13	.2L	613	340	1.0L	200	.7R	190	51	260	
14	.1R		340	.9L	200	.8R	200	51	280	
15	.7R	384	350	.4L	200	1.3R	190	103	300	
16	.OR	170	350	.9L	200	.7R	190	103	310	
17	.1L		340	.9L	200	.5R	180	: 103	330	
18	.OR	114	340	.7L	200	.9R	190	103	330	
19	.2R		350	.4L	200	.9R	180	103	350	
20	.3R	85	330	.6L	190	.9R	180	154	360 360	
21	.OR		340	.5L	200	.8R	190 180	154 205	360	
22	.1L	66	330	.8L	200	.5R	180	205	370	
23	.2R		340	.6L	190 190	.8R 1,1R	180	205	360	
24	.4R		340 340	.2L .4L	190	.9R	180	257	370	
25	,3R	66 54	350	.5L	190	.7R	190	308	360	
26	.1R		340	.7L	190	.7R	180	410	370	
27 28	.OR	54	340	.6L	190	.4R	170	462	360	
26 29	.OR	39	330	.5L	190	.6R	170	462	370	
30	. 1R	29	340	.3L	180	.5R	150	770	350	
31	. OR	25	330	3L	180	-4R	150	718	340	
32	- 1R	22	330	.3L	190	.1R	. 140	1026	36 0	
33	.OR	24	3 3 0	.3L	190	.OR	130	1283	350	
34	.3L	22	340	.5L	180	.4L	100	1693	370	
35	.1L	22	330	.3L	170	.9L	60	5130	370	
36	.OR	19	30د	. OR	160	.7L	30	20366	360	
37	.3R	17	320	.3R	130	2.OL	50	36064	370	
38	.OR	14	280	.8R	50	.3R	0	51300	380	
39	.1R	15	240	.7R	10	.1R	10	51300	380	
40	.2R	12	270	.4R	40	.4R	0	36064	470	
41	.4R	12	300	.5R	40	.3R	10	20366	450	
42	.2R	8	280	.7R	30	2.7R	20	20366	· 390	
43	.2R	8	280	.7R	50	.1R	30	38 48	380	
44	.OR	. 7	290	.6R	80	.3R	20	3848	380	
45	OR	• 7	3) 1	.7R	100	.3R	20	20366	440	

FLT P	URPOSE	- REFERENCE	PHASE I	ALT FL	N 3000	FLT DIRE	CTION - TO	DESTRAB	LE - VOR
	RC	VR 1	·	RCV	R 2	RCV	R 3	RC	VR 4
DIST	.CP	uv	FLAG	CP	FLAG	CP	FLAG	uv	FLAG
1	1.5L	5095	330	1.4L	190	1.8L	190		
2	.OR	5095	330	.1L	190	.7L	180		
3	.4R	5095	340	.2R	190	.3L	190		
4	.7R	5095	230	.5R	190	.OR	190		
5	.2L	5095	340	.4L	190	1.0L	190		
6	.OR	5095	350	.2L	190	.8L	210		
7	.5L	5095	350	.5L	190	1.2L	210		
8	.2L	5095	350	.4L	190	1.0L	210		
9	.5R	3396	360	.3R	190	.4L	210		
10	.3R	3396	360	1R	190	.6L	210	··	
11	.1L	1698	350	.1L	190	.9L	190		
12	.OR	1698	350	.2L	190	.8L	190		
13	.2R	1194	350	.1R	190	.5L	190		
14	.1R	1194	340	.1R	190	.5L	190		
15	.6R	1194	350	.2R	190	.4L	190		
16	.7R	674	350 350	.4R	190	.OR	190		
17	.9R	674	350	.2R	190	.3L	190		
18	.OR	674 170	350 350	.OR	190	.5L	190 190		
19	.OR	143	350	.OR .2R	190 190	.5L	190		
20	.3R .7R	143	350	.7R	190	.2L	190		
22	.1L	143	340	.7K	190	.1L	180		
23	.1L	109	340	.OR	190	.8L	180		
24	.1R	114	340	.OR	190	.4L	180		
25	.5R	85	340	.4R	190	.2L	190		
26	. 1R	85	340	.1R	190	.5L	180		
27	.3L	75	340	.OR	190	.9L	170		
28	.OR	75	340	.1R	190	.5L	180		
29	.8R	65	350	.7R	190	.OR	180		
30	.3R	65	350	.3R	190	.3L	180		
31	.1R	53	340	.1R	180	.4L	170		
32	.1R	53	340	.1R	180	.5L	170		
33	.6R	53	350	•5R	190	•OR	180		
34	.2R	42	340	.3R	180	.3L	170		
35	, OR	34	340	2R	180	.4L	170		
36	.OR	31	330	.1R	180	.5L	170		
37	.3R	31	340	.4R	170	.2L	170		
38	.7R	31	340	.7R	180	.OR	170		
39	.5R	24	340	. 5R	180	.OR	160		
40	, OR	24	330	.2R	170	.4L	160		
41	.OR	22	330	.2R	170	.5L	150		
42	.5R	19	330	.5R	170	.OR	160		
43	.5R	19	340	.6R	170	.OR	160		
44	.2R	15	340	.5R	160	.OR	160		
45	, 1R	14	330	.5R	160	.OR	150		

FLT PU	RPOSE -	TEST	PHASE I	ALT FI	N 3000	FLT DIRE	CTION - TO	DESIRAB	LE - VOR	
	RCV	R 1		RCV	7R 2	RCV	R 3	RC	VR 4	
DIST	CP	uv	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1 .	.8L	5095	310	1.0L	180	.6L	190	26	170	
2	.2R	5095	300	.1L	190	.OR	190	26	190	
3	.2L	5095	300	.8L	190	.5L	220	26	220	
4	.OR	50 9 5	290	.4L	190	.1L	190	26	220	
_ 5	6L	5095	300	1.2L	190	.8L	210	26	240	
6	.7L	5095	310	1.3L	190	1.0L	220	26	260	
7	.5L	5 095	320	1.1L	190	.8L	220	26	290	
8	.6L	5095	320	1.3L	190	.9L	220	26	300	
9	.2L	5095	320	.9L	190	.2L	210	26	330	
10	.2L	5095	320	.8L	190	.2L	210	26	320	
11	, IL	5095	330	.81.	190	.2L	190	26	320	
12	.2L	5095	320	1.0L	190	.2L	190	26	340	
13	.OR	5095	320	•7L	190	.2L	190	51 51	350 350	
14	OR	5095	320 320	.7L	190	.3L	190 190	51	350 350	
15	OR OR	3396	310	.7L .6L	190 190	.2L	190	77	360	
16	.OR	3396 1698	320	.5L	190	.2L	190	77	390	
17 18	.OR	1698	320	.6L	190	.2L	190	103	390	
19	.OR	1194	320	.4L	190	.OR	190	103	390	
20	.OR	1194	310	.5L	180	.2L	190	103	400	
21	.OR	1194	320	,5L	190	.OR	190	128	380	
22	.OR	674	320	.5L	190	.2L	180	154	390	
23	.OR	674	320	.51.	190	.1L	190	180	390	
24	.OR	170	310	.3L	190	, OR	190	205	3 90	
25	.OR	143	310	. 4L	180	.OR	180	231	390	
26	.2L	143	320	.5L	190	.2L	180	257	390	
27	.7R	143	320	.OR	180	.4R	190	282	39 0	
28	.OR	114	310	.3L	190	.OR	180	385	39 0	
29	.2L	114	320	.5L	180	.3L	180	462	390	
30	.2L	114	310	.4L	180	.2L	170	590	390	
31	.3L	7 5	320	.5L	180	.2L	170	641	39 0	
32	.OR	75	310	.2L	180	.2L	170	846	39 0	
33	.7R	65	320	.4R	180	.1R	160	1077	3 90	
34	.7R	65	320	.3R	180	.OR	150	1924	390	
35	.2R	65	320	.OR	180	1.2L	130	2565	390	
36	.OR	53	320	.OR	170	1.0L	90	10183	390	
37	.OR	42	320	.OR	170	1.8L	40	18032	410	
38	.OR	42	310	.1R	160	1.1L	40	25650	460	
39	.OR	34	310	.3R	160	4.4L	30	18032	550	
40	.OR	31	310	. 1R	160	2.8L	40	10183	450	
41	6R	31	310	1.0R	110	2.1L	10	25650	450	
42	.2R	22	300	1.0R	100	3.1R	20	51300 25650	550 490	
43	.5R	24	300	1.1R	120	3.3L	30 50	18032	490	
44	.3L	14	310	. 5R	110	2.1L	10		390	
45	.2L	15	300	. 5R	130	.8L	10	10183	390	

FLT P	URPOSE	- REFERENCE	PHASE 1	ALT FL	N 3000	FLT DIREC	TION - FROM	DESIRAB	LE - VOR
	RC	VR 1	•	RCV	R 2	RCV	R 3	RC	VR 4
DIST	CP	ųу	PLAG	CP	FLAG	CIP	FLAG	uv	FLAG
1	1.9R	5095	330	1.1R	200	1.8R	200		
2	.3R	5095	330	.1R	190	.5R	200		
3	.3R	5095	340	.2L	200	.4R	230		
4	.OR	5095	350	.7L	210	.OR	230		
_ 5	.OR	5095	350	.5L	210	.OR	230		
6	, 8R	5095	360	.1R	210	.5R	230		
7	1.2R	3396	360	.6R	200	1.0R	230		
8	.8R	3396	370	. 1R	210	.5R	230		
9	. 1R	1698	370	.4L	210	.2R	240		
10	.OR	1698	360	.6L	200	. OR	230		
11	.7R	1194	370	.OR	210	.3R	240		
12	.4R	1698	360	.1L	200	.2R	230		
13	.OR	674	360	.4L	210	.OR	230		
14	.2R	674 1	370	.2L	210	.2R	230		
15	.4R	674	360	.1L	200	.2R	230		
16	.2R	170	360	.2L	200	.1R	230		
17	.2R	143	370	.2L	210	.2R	220		
18	.4R	143	360	, 1L	210	.1R	220		
19	.3R	143	360	. 1L	200	.1R	210		
20	.2R	114	350	. IL	190	.1R	220		
21	.2R	75 85	350 350	.OR	200	.1R	210 210		
22 23	.3R	85	350	.OR	190 190	. 1R . OR	210		
	.1R .OR	75	350	.2L	210	.OR	210		
24 25	.UR	75 75	350	. 1L	190	. 1R	200		
26	.2R	65	350	OR	190	.1R	200		
27	.2R	53	350	.OR	190	.1R	190		
28	.4R	42	350	.OR	190	.1R	200		
29	.3R	42	350	. 1R	190	.OR	200		
30	2R	53	350	.OR	190	. 1R	190		
31	,2R	42	340	.OR	190	.OR	190		
32	.OR	34	350	•OR	190	.OR	200		
33	. 1R	34	350	.OR	190	.OR	200		
34	.2R	34	360	.OR	190	.OR	190		
35	1R	25	340	.OR	190	.OR	190		
36	, 1R	24	350	. 1R	180	, 1R	190		
37	.2R	22	350	. 1R	190	.OR	190		
38	.2R	22	350	. 1R	180	.OR	190		
39	.1R	19	350	.1R	180	.OR	180		
40	. 1R	19	340	. 1R	180	.OR	190		··········
41	.2R	15	350	.4R	180	.2R	180		
42	. 2R	14	350	.4R	180	. 1R	190		
43	.2R	14	350	.4R	170	. 1R	180		
44	.2R	12	350	.4R	170	. 1R	180		
45	. 1R	12	340	.5R	160	.OR	180		

FLT	PURPOSE	- TEST	PHASE I	ALT FL	N 3000	FLT DIREC	TION - FROM	DESIRAB	LE - VOR	*
	RO	CVR 1		RCV	R 2	RCV	7R 3	RC	VR 4	
DIST	CP	UV	FLAG	CP	FIAG	CP	FLAG	uv	FLAG	
1	1.3L		300	1.0L	180	.6L	160	26	260	
2	1.0R		300	. 7R	190	.9R	180	26	280	
3	.OR		310	.3L	190	.1R	190	26	300	
4	.2L		310	.6L	190	.OR	180	26	320	
5	. 1R		310	.1L	190	.3R	190	51	330	
6	, OR		310	.4L	190	. IR	190	51	330	
7	.2R		320	.1L	190	. 2R	210	51	340	
8	.OR		320	.7L	190	.1L	190	51	350	
9	.2R		330	.1L	190	.1R	190	51	360	
10	. OR		320	.1L	190	.1R	190	51	360	
11	.OR		320	.4L	190	. OR	190	77	350	
12	.4R		320	.11	190	.3R	190	77	370	
13	.OR		320	.2L	190	.OR	190	77	380	
14	.OR		320	.2L	190	.1R	190	103	380	
15	.1R	1698	320	.1L	190	,1R	190	103	380	
16	. 1R		320	.1L	190	.1R	190	128	380	
17	.OR		J20	.2L	190	. OR	180	128	380	
18	.OR		320	, 2L	190	.OR	180	154	390	
19	, OR		320	. 1L	190	.2R	180	180	390	
20	.1R	170	310	.1L	180	.1R	180	205	390 390	
21	.1R	143	310	. 1L	160	. IR	180 190	257 257	400	
22	. 1R	114	320	.OR	190 190	.2R	180	282	390	
23	.OR	114 75	320	.OR	180	.2R .4R	180	333	400	
24	.2R	75 75	320	.1R .OR	180	.2R	180	385	400	
25	. 1R	75 75	310	.OR	180	.0R	180	462	390	
26	, OR	65	310	.OR	180	.3R	180	513	400	
27	.2R	65	320	.OR	180	.1R	170	641	390	
28	. OR . OR	65	320	.1L	180	.OR	160	846	390	
29 30	.OR	65	310	.OR	180	.1L	160	846	390	
31	.OR	65	310	, OR	180	.11	160	1283	390	
32	.OR	42	310	.OR	170	.5L	140	1924	390	
33	.OR	34	310	.OR	170	1.5L	100	2565	390	
34	.OR	34	310	.OR	170	1.5L	60	10183	380	
35	.OR	31	310	.2R	160	1.7L	90	.10183	380	
36	, 1R	25	310	.3R	150	1.5R	10	25650	390	
37	, OR	24	300	. 7R	120	3.3L	30	51300	400	
38	OR.	22	300	1.OR	70	1.7L	10	51300	460	
39	OR.	19	290	1.OR	50	1.6R	0	51300	560	
40	.OR	19	310	.3R	150	1.1L	30	2565	720	
41	.1R	17	310	.7R	110	3.5L	30	35630	800	
42	.OR	15	300	.7R	100	3.8L	20	51300	500	
43	.OR	14	310	.9R	100	2.5L	30	18032	440	
44	.1R-		310	.7R	120	.8L	10	18032	410	
45	.1R	12	310	.6R	130	.5L	10	2565	. 390	

FLT PU	RPOSE -	REFERENCE	PHASE I	ALT FL	N 4000	FLT DIREC	TION - TO	DESTRAB	LE - VOR
	RCV	R 1	•	RCV	R 2	RCV	R 3	RC	VR 4
DIST	CP	uv	PLAG	CP	FLAG	CP	FLAG	บง	FLAG
1	8L	5095	310	.9L	190	1.0L	:170		
2	.8L	5095	330	1.2L	210	1.0L	190		
3	.4R	5095	330	.3L	210	.2L	190		
4	. 7R	5095	340	.2L	210	.2L	210		
5	. OR	5095	340	.6L	210	.6L	190		
6	.2L	5095	340	1.0L	210	.9L	210		
7	. OR	5095	350	1.0L	210	.9L	210		
8	.OR	5095	350	.7L	220	.5L	220		
9	.2R	5095	360	.6L	220	.5L	220		
10	.5R	5095	350	.4L	220	.2L	210		
11	.7R	3396	360	.2L	220	.2L	220		
12	1.OR	3396	350	.OR	220	.1R	210		
13	1.3R	3396	350	.2R	220	.2R	210		
14	1.6R	3396	350	.3R	220	.3R	210		
15	1,3R	3396	340	.2R	210	.2R	210		
16	1.1L	1698	350	. 1R	210	. 1R	190		
17	.1R	1194	340	.3L	210	3L	190		
18	.1R	1194	340	.5L	210	.5L	190		
19	. 1R	1194	340	.51	210	5L	190		
20	, 4R	674	340	.2L	210	.3L	190		
21	.5R	674	340	.OR	210	.2L	190		
22	.7R	674	340	.OR	210	.OR	190		
23	.7R	674	340	.OR	210	.OR	190 190		
24	.9R	170	350	.1R	210	.1R .OR	190		
25	,8R	170 143	340 330	. 1R	210 210	.OR	190		
26	.7R		340	. 1R	210	.OR	190		
27	. 7R	117 114	340	. 2R	210	.2R	190		
28 29	1.OR 1.2R	114	340	.5R	210	.3R	190		
30	1,1R	114	340	.5R	210	.3R	190		
31	1.0R	85	340	.3R	210	.2R	190		
32	.7R	75	340	.2R	190	.1R	180		
33	.3R	75	330	.OR	190	.1L	180		
34	.4R	65	330	.OR	190	.1L	180		
35	OR	53	340	.1L	190	.3L	180		
36	.OR	53	330	.1L	190	.41.	170		
37	.OR	53	320	.2L	190	.3L	170		
38	OR	42	330	.2L	190	.5L	170		
39	.OR	42	330	. 1L	190	.4L	170		
40	OR	42	330	.OR	190	.2L	170		
41	OR	34	330	. OR	190	.IL	170		······································
42	.OR	34	330	.OR	190	.1L	170		
43	.OR	25	330	.OR	190	.2L	160		
44	OR	24	330	.1L	180	.4L	160		
45	OR	24	320	.OR	180	.3L	160		

FLT	PURPOSE	- TEST	FHASE I	ALT FL	N 4000	FLT DIREC	TION - TO	DESTRABI	LE - VOR	
	Ro	CVR 1		RCV	R 2	RCV	7R 3	RC	/R 4	
DICT	CP	υv	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
DIST	CF	UV	FIAG	Cr	FLAG	CF		UV		
1	1.8L	1698	320	1.0L	190	1.1L	170	26	250	
2	1R	5095	370	.OR	210	.1R	190	26	280	
3	2.1R		340	1.6R	590	1.4R	190	51	280	
4	1.1R	5095	350	, 5R	210	.8R	220	51	310	
5	.6R		350	.1R	210	.2R	210	51	320	
6	.OR		350	. 2L	210	,1R	210	51	330	
7	.4L	5095	350	.5L	220	.3L	220	51	330	
8	.7L		350	.9L	210	,5L	220	51	350	
9	.6L		370	.9L	220	.6L	220 220	77	350 3 60	
10	.1L		370	.7L	220	.4L	220	77		
11	.3R		370	.2L	210	•ZL	210	77	360	
12	.2R		360	.2L	210	.OR .4L	210	103	370	
13	.2R	1698	350	.3L	210	.3L	210	103 103	380 380	
14	.2R		360 .350	.3L .2L	210 200	.3L	210	128	380	
15	.2R		350	.2L	210	,6L	210	.128	380	
16	.4L		350	.5L	210	.8L	200	154	380	
17 18	.4L		350	,8L	210	1.0L	200	180	380	
19	1.0L		350	.9L	200	1.1L	190	205	380	
20	.9L		340	.9L	200	1.2L	180	231	380	
21	.8L		340	.9L	200	1.01	180	231	370	
22	.7L		350	.7L	200	1.1L	180	205	380	
23	5L		340	.5L	200	.8L	190	333	370	
24	.OR		350	.2L	200	.5L	190	333	380	
25	.2R		350	.OR	210	.3L	200	333	380	
26	.7R	114	350	.4R	210	. UR	210	462	370	
27	.7R	114	360	.4R	210	.OR	190	513	370	
28	.7R		350	.4R	200	.OR	190	513	370	
29	.7R		350	.3R	200	OR	180	.588	370	
30	,5R		360	.2R	200	.4L	180	846	370	
31	.OR		360	.OR	200	.5L	.180	846	370	
32	.3L	6 5	340	.2L	200	•7L	170	1077	380	
33	.4L	65	340	.3L	190	8L	160	1283	370	
34	.5L		340	.3L	180	1.0L	150	1924	380	
35	.6L		340	.3L	190	.5L	130 90	2565	370	
36	.3L		350	.2L	190	2,1L	70	1924	380 380	
37	.4L		340	.2L	180	1.9L	80	10183	420	
38	.2L		350	.OR	190	2,0L	70	2565	490	
39	.5R		340	.3R	200	1.3L 2R	80	2565 2565	420	
40	.6R		350 330	.5R .7R	180 170	2.01.	70	18032	470	
41	.3R		340	. /R . 6R	170	1,8L	70 60	18032	450	
42	.2R	31 25	340	. 5R	170	3,3L	70	18032	400	
43	.OR		340	.2R	180	1.1L	20	10183	360	
44	.1L .9L		350	. OR	170	.5L	20	18032	340	
45	,7L	13	330	. UR	1/0	, ,,,,		40074	340	

PLT P	URPOSE -	REFERENCE	PHASE I	ALT PL	N 4000	FLT DIREC	TION - FROM	DESTRAB	LE - VOR
	RCV	'R 1		RCV	R 2	RCV	TR 3	RC	VR 4
DIST	CP	uv	FLAG	CP	FLAG	CIP	FLAG	uv	FLAG
1	3.3L	3396	330	2.7L	190	3.0L	160		
2	.8L	3396	360	1.0L	200	1.4L	190		
3	2.6R	3396	340	1.4R	210	1.1R	180		
4	.2L	5095	350	.5L	200	.8L	190		
5	.8L	5095	350	1.0L	200	1,4L	180		
6	.2R	3396	350	.4L	200	.7L	190		
7	.2R	5095	340	.3L	210	.6L	190		
8	.2L	5095	370	.7L	210	1.0L	200		
9	.OR	3396	370	.5L	210	.9L	200		
10	.1R	1698	370	.5L	210	8L	200		
11	.OR	1194	370	.5L	210	.9L	190		
12	.OR	1194	370	.5L	200	.8L	190		
13	.2L	674	360	.5L	210	.9L	190		
14	.3L	674	360	.7L	210	1.0L	190		
15	,1R	674	360	,3L	200	.8L	190		
16	.2R	170	360	.2L	200	.6L	190		
17	.OR	170	360	.4L	200	.8L	180		
18	.OR	170	350	.4L	200	.3L	180		
19	.2R	143	360	.3L	200	.7L	180		
20	,3R	143	360	.3L	200	.7L	180		· · · · · · · · · · · · · · · · · · ·
21	.OR	114	350	.3L	200	.7L	180		
22	.OR	143	350	.2L	200	.7L	180		
23	.1R	85	350	.1L	210	.5L	190		
24	.OR	114	350	.3L	200	.7L	180		
25	OR	75	350	.2L	210	.7L	180		
26	.2R	75	350	, 1L	200	.4L	180		
27	.OR	75 75	360	.11	200	.7L	180		
28	. 1R	65	360	.OR	190	.5L	180		
29	, 1R	65	350	.OR	200 200	.4L	180		
30	1R	53 53	360 350	, 1R	200	,4L	180 180		
31	. IR	42	350	.1R .1R	190	.5L	160		
32	.1R		360		200	.4L	170		
33	.2R	42	360	.1R .1R	200	.4L	180		
34 35	.1R .OR	34	360	~ .OR	200	.4L .5L	180		
	.OR	34	350	OR .	190	.4L	180		
36 37	. 1R	34	350	.0R	190	.5L	160		
38	.1R	25	340	.1R	180	.4L	180		
39	.OR	24	350	.OR	180	.4L	160		
40	. 1R	25	360	. 1R	190	.4L	160		
41	.3R	22	350	,3R	190	.4L	170		
42	.3R	22	350	.3R	190	.3L	170		
43	.OR	19	360	.1R	180	.5L	170		
44	.OR	19	350	.2R	180	.3L	170		
45	.3R	17	350	.2R	180	.2L	170		

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FLT I	PURPOSE -	TEST	PHASE I	ALT FL	N 4000	FLT DIREC	TION - FRO	M DESTRAB	LE - VOR	
	RCV	R 1		RCV	R 2	RCV	TR 3	RC	VR 4	
DIST	CP	UV	FLAG	CP	FLAG	CP	FLAG	υv	FLAG	
1	2.6L	5095	330	2.31	200	1.8L	180	51	340	
2	.5L	1700	350	.8L	200	.4L	220	51	340	
3	2.4R	1194	340	1.3R	200	1.8R	190	51	370	
4	.1L	5095	340	.8L	210	.3L	220	51	350	
5	,6L	3396	340	1.0L	210	.6L	210	77	370	
6	, 1R	5095	350	.4L	200	.1R	210	77	370	
7	.1R	5095	360	.4L	210	.OR	220	77	380	
8	.lL	3396	350	.9L	220	.4L	240	77	380	
9	.1R	3396	360	.6L	220	.3L	230	103	380	
10	, OR	3396	350	.7L	210	.4L	220	103	380	
11	.4R	1194	350	.4L	210	. 1R	210	103	380	
12	.OR	1698	350	.7L	220	.4L	220	103	380	
13	.1L	1194	350	.7L	210	.4L	220	128	390	
14	.2R	1194	360	.4L	200	.OR	220	154	370	
15	.2R	1194	350	.4L	210	.OR	220	154	390	
16	.OR	674	350	.6L	200	.3L	210	180	390	
17	.OR	674	350	6L	210	.3L	220	205	390	
18	.3R	75	350	.3L	210	. OR	230	231	390	
19	.OR	170	360	.5L	216	.3L	220	231	380	
20	OR	114	360	.5L	210	.1L	210	231	390	
21	.2R	114	360	.3L	200	.OR	210	257	390	
22	. 1R	75	350	.3L	200	.OR	210	333	390	
23	.OR	114	340	.6L	200	.2L .1R	200 200	385 359	410	
24 25	.3R	114 75	350 340	.1L .2L	200 210	.OR	210	462	390 390	
26	2R	75	350	.3L	210	.2L	200	513	400	
	.OR	75 7 5	3 50	.3L	210	.1L	200	513	390	
27 28	.2R	42	350	.OR	200	.OR	200	590	400	
29	. OR	65	350	.2L	210	.1L	200	641	400	
30	. 1L	53	360	.3L	210	.3L	190	846	400	
31	.1R	53	350	.1L	200	.3L	200	846	430	
32	.2R	42	360	.1R	210	.3L	180	2077	410	
33	.2R	22	340	.1R	200	.3L	170	1283	420	
34	OR	34	350	.OR	210	.8L	150	1283	460	
35	1R	31	350 ~	OR	200	1.5L	120	2565	490	
36	, IR	34	360	.1R	200	1.5L	100	2565	520	
37	1R	34	350	.3R	180	1.3L	60	10183	470	
38	.OR	31	340	.3R	180	1.3L	50	10183	440	
39	. OR	22	350	.6R	160	1.3L	70	10183	440	
40	3R	25	350	.2R	190	1.3L	70	2565	440	
41	.3R	22	340	.3R	190	1.1L	60	1924	470	
42	.4R	22	350	.3R	190	1.1L	70	1924	420	
43	.3R	17	360	.4R	180	1.1L	50	2565	440	
44	.1R	17	350	.1R	180	1.3L	70	1924	490	
45	1R	15	350	3R	180	1,2L	100	1283	510	

FLT	PURPOSE	- REFERENCE	PHASE I	alt fi	N 5000	FLT DIR	ECTION - TO	DESIRAB	LE - VOR	
	RC	CVR 1	•	RCV	TR 2	RC	VR 3	RC	VR 4	
DIST	CP	υv	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1	.6R	3396	330	.1R	210	1.0R	190			
2	.6L	1698	350	.9L	210	.2R	200			
3	.3R	1438	330	.OR	200	.8R	170			
4	.3R	1698	350	.3L	220	.7R	200			
5	. 1R	3396	350	.5L	220	.5R	210			
6	.5R	1438	360	.3L	220	.9R	200			
7	.5R	1438 -	360	.2L	220	.9R	190			
8	.1R	1438	350	.6L	220	.5R	200			
9	.OR	1698	360	.7L	220	.4R	210			
10_	OR	1438	370	.8L	220	.3R	210			
11	.2R	1438	380	.8L	220	.3R	210			
12	.3R	1438	380	.7L	220	.3R	220			
13	.2R	934	370	.8L	220	.3R	210			
14	.3R	934	370	.8L	220	.3R	220			
15_	3R	934	370	.7L	220	3R	210			
16	.3R	934	380	.7L	220	.4R	210			
17	.6R	674	380	.5L	220	.6R	220			
18	.7R	430	380	.3L	220	.8R	210			
19	.6R	430	370	.3L	220	.9R	210			
	8R	170	380	.2L	220	9R	210			
21	.6R	170	370	.3L	220	.8R	210			
22	.6R	170 170	370 370	.3L	220	.7R	210			
23	.3R .1R	170	370	.3L .3L	210 210	.7R .5R	210 210	•		
24 25	. IR	170	370	.6L	200	.3R	200			
26	.OR	127	370	.6L	210	.3R	200			
27	.OR	127	360	.5L	210	.2R	200			
28	.OR	127	360	.5L	210	.3R	200			
29	.OR	127	370	.6L	210	.3R	200			
30	OR	107	360	.5L	200	.3R	190			
31	. 1R	85	370	,5L	210	.3R	200			
32	.5R	76	370	.1L	200	.7R	200			
33	.9R	76	370	.2R	210	1.0R	200			
34	.9R	76	360	.1R	200	.7R	200			
35	6R	76	360	OR	200	.6R	200			
36	.9R	59	370	.3R	200	1.OR	200			
37	.3R	59	360	, OR	200	.4R	200			
38	.2R	59	370	.1L	200	.3R	200			
39	.7R	39	370	.1R	200	.7R	190			
40	6R	51	370	.1R	200	.5R	190			
41	.8R	42	370	.3R	200	.8R	200			
42	.3R	42	360	.2L	200 .	.3R	200			
43	.3R	39	360	.2L	200	1.3L	200			
44	.8R	42	360	.3R	200	.8L	210			
45	- 8R	42	370	.3R	200	.9L	200			

		4								
FLT P	URPOSE	- TEST	PRASE L	ALT FI	IN 5000	FLT DIR	ECTION - TO	DESTRAB	LE - VOR	
	RC	VR 1		KC	JR 2	RCV	7R 3	RC	VR 4	
DIST	CP	uv	FLAG	CP.	FLAG	CP	FLAG	uv	FLAG	
		10%	*1					13.00		
1	1.6R	3396	330	1.3R	200	2.OR	200	51	200	
2	1.0L	1438	350	1.1L	210	.OR	200	51	220	
3	.4R	1438	340	.OR	200	1.0R	180	51	210	
4	.8R	1438	360	.2R	210	1.2R	200	51	240	
5	.9R	1438	350	.5R	220	1.4R	200	103	270	
6	.7R	1194	370	.OR	220	1.2R	220	103	280	
7	.5R	1438	360	.OR	210	.8R	210	103	300	
8	.4R	1438	360	.3L	210	.9R	210	103	320	
9	1.0R	1194	360	.2R	220	1.4R	210	103	320	
	1.5R	1194	360	.7R	220	1.7R	190	. 103	330	
11	1.7R	1438	360	.6R	220	1.8R	200	154	350	
12	.6R	1194	370	.3L	220	.9R	220	154	350	
13	.3R	1194	370	.6L	220	.6R	220	154	350	
14	.7R	674	390	.3L	220	1.0R	230	154	370	
15	.5R	934	380	.5L	220	.7R	220	205	370	
16	.2R	934	370	.8L	220	.4R	220	205	380	
. 17	.OR	127	360	1.0L	220	•2R	210	257	380	
18	.OR	674	370	.81	210	.3R	220	257	380	
19	1.0R	430	380	.3L	220	.9R	220	257	370	
20	1.0R	430	370	.iL.	220	1.1R	210	257	380	
21	.5R	430	3 / 0	.4L	210	.5R	210	359	380	35 (Ver 1 1)
22	.3R	430 .	370	.6L	210	.4R	210	51	400	
23	.4R	127	350	.3L	216	.5R	210	462	360	
24	.5R	170	370	.3L	210	.7R	210	462	370	
25	1.4R•	149	370	.4R	210	1.5R	210	513	370	
26	2.5R	149	370	1.2R	210	2.1R	220	513	390	
27	2.3R	149	370	1.1R	210	2.1R	210	564	400	
28	2.5R	127	3.70	1.2R	210	2.2R	210	718	400	
29	1.4R	127	380	.7R	210	1.5R	210	770	410	
30	.4R	127	370	, 1L	210	.7R	200	1026	410	
31	.OR	76.	360	.5L	210	.3R.	200	1693	390	
32	.1R	85	360	.4L	210	.4R	200	1283	400	
33	.8R	76	370	.2R	220	.8R	210	1693	400	
34	.9R	85	380	.3R	210	.9R	200	2155	380	
35	,3R	76	370	.OR	210	.2R	190	3848	380	
36	.4R	68	360	. 1R	210	.1R	180	2565	400	
37	.7R	68	370	.3R	200	.5R	180	3848	490	
38	.6R	51.	360	.2R	210	.4R	180	2565	530	
39	.4L	. 51	360	.5L	200	.OR	180	2155	540	
40	.4L	. 51	370	.3L	200	.4L	170	2155	430	
41	.3R	51.	370	.3R	190	2.7L	90	20366	460	
42	.9R		360	.7R	200	1.6L	80	20366	520	
43	.1R	39	370	.3R	200	1.7L	90	20366	480	
44	.2L	34	350	.OR	190	2.2L	90	20366	400	
45	.1L	34	350	. IR	200	.9L	90	20366	390	

FLT I	PURPOSE -	REFERENC	E PHASE I	ALT FI	N 5000	FLT DIRE	CTION - FROM	DESTRAB	LE - VOR
	RCV	R 1		RCV	/R 2	RCV	TR 3	RC	VR 4
DIST	CP	uv	FLAG	CP	FLAG	CIP	FJAG	uv	FLAG
1	2.6L	1194	330	2.3L	180	1.7L	170		
2	.6R	1438	340	.1L	210	1.0R	180		
3	1.1R	674	330	1.0L	210	1.5R	180		
4	. 1R	1438	340	.5L	210	.7R	180		
5	.4L	1698	360	1.0L	220	.2R	200		
6	.5R	1438	360	.5L	220	.7R	190		
7	.4R	1438	350	.3L	210	.7R	190		
8	.2R	1438	350	.6L	210	.5R	190		
9	.3R	1438	360	.6L	220	.5R	210		
10	,2R	934	360	.8L	220	.4R	200		
11	.9R	934	360	.OR	220	1.2R	200		
12	1.6R	934	370	.4R	220	1.4R	200		
13	.9R	674	370	.OR	220	1.0R	200		
14	.4R.	674	370	.4L	220	.8R	210		
15	, 5R	170 674	370 370	5L	210	,6R	200		
16	.5k	170	370 370	.4L	210	.8R	190		
17 18	.6R .5R	127	370	.3L .3L	210 210	.7R	200 200		
19	.3R	170	370	.3L	210	.7R .6R	200		
20	1R	170	360	.4L	210	,5R	210		
21	.2R	127	370	.3L	220	.7R	200		
22	. 7R	76	370	.2L	210	.7R	190		
23	. 5R	127	370	.2L	210	.8R	200		
24	, 3R	107	370	.3L	210	.6R	200		
25	.4R	107	370	.2L	210	.7R	190		
26	.4R	85	360	.2L	210	.7R	200		
27	.4R	85	370	.2L	210	.7R	200		
28	.3R	76	370	.4L	210	.6R	200		
29	.2R	76	3€0	.3L	210	.5R	200		
30	.2R	76	360	,4L	210	, 5R	200		
31	.3R	68	370	.3L	210	.5R	200		
32	.3R	68	370	.2L	210	.5R	190		
33	.3R '	59	360	.3L	200	.5R	200		
34	.2R	. 51	360	.1L	210	.5R	190		
35	1R	51	360_	.2L	210	6R	190		
36	.1R	51	370	.3L	210	.5R	190		
37	.OR	42	360	.1L	190	.5R	190		
38	.1R	39	360	.1L	200	.5R	190		
39	.4R	34	360	. 1R	190	.5R	190		
40_	2R	29	360	OR	190	.5R	180		
41	.OR	31	370	. 1L	200	.5R	190		
42	.OR	31	360	. 1L	190	.3R	190		
43	OR	31	370 360	.1L	200	.4R	190		
44	.3R	29	360 360	. 1R	200	.6R	180		
45	3R	25	360	2R	190	5R	180		*

FLT P	JRPOSE -	TEST -	PHASE I	ALT F	IN 5000	FLT DIRE	ection - Fro	M DESIRABL	E - VOR	
	RCV	7R 1		RC	VR 2'	RCV	/R 3	RCV	R 4	
DIST	CP	עע	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1	8.3R	710	330	7.6R	190	8.8R	180	74	300	
2	6.4R	49 9	350	4.9R	200	4.2R	230	109	300	
3	2.9R	391	340	2.1R	180	2.9R	170	109	290	
4	.3R	601	330	.OR	< 200	1.3R °	190	74	300	
5	.9L	716	340	1,2L	220	1R	200	109	340	
6	.3R	710	349	.6L	230	.5R	220	109	330	
7	1.3R	601	340	.5R	220	1.4R	200	144	360	
8	1.2R	601	340	.4R	210	1.6R	200	144	370	
9	.3R	710	340	.4L	220	.7R	190	144	380	
10	.1R	710	340	.7L	220	,6R	200	144	380	
11	.5R	499	340	.2L	210	.8R	210	183	370	
12	.8R	499	340 350	.2L	210	1.1R	210	183	380	
13	.5R	499 499	350 350	.3L .4L	220 220	.9R .7R	210 210	183 218	380 380	
14	.5R	499	340	.5L	220	.7R	220	218	390	
15 16	.3R .3R	282	340	.4L	210	.7R	210	257	400	
17	.5R	-180	240	4.1	210	.6R	210	292	400	
18	.4R	282	340	51.	210	.7R	210	327	400	
19	.4R	180	350	.5L	220	.6R	220	327	400	
20	.4R	64	250	ET	210	6R	200	366	410	
21	.2R	64	340	,6L	210	.4R	210	545	400	
22	.3R	64			210	.4R	210	545	400	
23	.4R	64		.5L	210	.6R	210	510	410	
24	.4R	57	370	.1L	210	.7R	210	619	420	
25	1.OR	57		3R	200	1.3R	210	728	410	
26	.4R	43	3,0	, , , ,	210	.6R	210	728	410	
27	.4L	50	350	6L	210	.3R	190	911	410	
28	.2R	43	360 360	.3L	299	.4R	200	1129	410	
29	.3R	43	360	.2L	200	. 5R	200	1603	400	
30	. 2R	33	360	. OR	200	.3R	. 190	1603	420	
31	.3R	43	360	.2L	200	.3R	190	1603	410	
32	.3R	36	340	.1L	200	. 1R	180	1821	410	
33	.3R	33	350	. 1L	200 210	.1L	170	2732	410	
34	OR '	33	360 == 360	.1L .2R	200	.1L	160 100	2296	410	
35	2R	28 26	350	.2R	190	1.8L .7L	70	3206	410	
36	.OR	26	360	.2R	200	1.0L	50	3 642 3642	470	
37	. 1R	23	350	.2R	190	1.7L	60	3206	530	
38 39	.OR .3R	21	350	.3R	180	2.7L	50	3642	490	
40	. JR	16	360	. OR	200	.3R	170	3642	440	
41	.OR	21	360	.OR	200	.9L	110	2732	470	
42	.1R	23	30د	, OR	190	.7L	130	1821	530	
43	. 1R	16	360	. 1R	180	.7L	120	2732	520	
44	OR	21	360	SC.	190	.8L	130	1821	460	
45	OR	14	360	.OR	190	,9L	120	2732	440	

FLT	PURPOSE	- REFERENCE	PHASE I	ALT PL	N 10000	FLT DIRE	CTION - TO	DESIRAB	LE - VOR	
	RC	VR 1		RCV	R 2	RCV	R 3	RC	VR 4	
DIST	CP	uv	FLAG	СР	FLAG	CP	FLAG	υv	PLAG	
1	.OR	3396	320	.OR	190	.8R	150			
2		3396	350	.5L	210	.6R	180			
3		1438	330	.6R	200	1.5R	170			
4	.3L	1698	350	.7L	210	.3R	200			
5	1.4L	934	360	1.6L	210	.4L	200			
6		1194	340	.4R	200	1.1R	170			
7	1.1R	1194	350	. 7R	210	1.4R	180			
. 8	.3R	1438	360	.OR	210	.7R	200			
9		1438	350	.2R	210	1.1R	190			
10		1438	360	.2L	200	, 8R	190			
11		1438	360	.3L	210	.6R	200			
12		1438	360	.1L	210	.9R	190			
13		1194	350	. 1R	200	.7R	180			
14		934	360	. 1R	210	.8R	190			
15		1194	350	.OR	210	.8R	190			
16		1194	360	.4L	210	.4R	200			
17 18		1194 1194	350	.6L	210	.3R	200			
		1194	360 370	.6L	210	.3R	200			
19 20		934	370 3 7 0	.6L	210	.2R	200			
21		934	380	.7L	210 210	,3R	210 200			
22		934	370	.6L	210	.3R	210			
23		934	370	.5L	210	.3R	210			
24		934	370	.5L	210	.4R .5R	210			
25		674	370	.5L	210	.4R	210			
26	.4R	430	380	.3L	210	.7R	210			
27		674	380	.2L	210	.7R	210			
28		430	370	.3L	210	.6R	210			
29	.3R	430	370	.5L	210	.5R	210			
30		170	380	.5L	210	, 5R	200			
31	.1R	430	380	.4L	210	.4R	200			
32	.2R	170	370	.4L	210	. 5R	200			
33	.3R	149	370	.3L	210	.5R	210			
34	.5R	149	370	.3L	210	.6R	200			
35	.4R	127	370	,3L	210	.6R	200			
36	.4R	127	370	.3L	200	.6R	200			
37	.4R	127	360	.2L	210	.5R	200			
38	.4R	127	360	.3L	200	.4R	200			
39	.2R	127	360	.3L	200	.4R	200			
40	.2R	107	360	.4L	200	,4R	200	 		
41	.3R	85	360	.3L	210	.4R	200			
42	. 5R	107	370	.3L	210	.7R	200			
43	.6R	85	380	. 1R	210	.8R	200			
44	.9R	85	370	.2R	210	1.1R	200			
45	1,2R	85	380	,3R	210	1,2R	200			

FLT	PURPOSE	- TEST	PHASE I	ALT FI	N 10000	FLT DIR	ECTION - TO	DESIRAB	LE - VOR	
	RO	CVR 1		RCV	/R 2	RCV	7R 3	RC	VR 4	
DIST	CP	υV	FLAG	СP	FLAG	CP	FLAG	ייע	FLAG	
		~-9						Bor go eg e ge		
1		3396 🚁	300	2.2R	180	1.9R	160	103	340	
2		3396	340	.4R	190	3.7R	130	154	350	
3		3396	320	1.0R	190	1.8R	170	154	360	
4		1698	340	,4L	210	.3R	190	154	370	
5	1.2L	.1698	350	1.4L	210	51_	190	205	370	
6		1438	320	.3R	190	.9R	150	154	380	
7		1438	340	.6R	210	1.5R	180	205	380	
8		1698	340	. 1R	210	1.0R	190	205	390	•
9		1698	340	.4R	210	1.1R	190	205	390	
10		1698	350	,5L	210	. 2R	190	205	400	
11		1698	340	.6L	210	.OR	190	257	390	
12		1698	340	.4L	210	.2R	190	257	400	
13	.OR	1698	350	.4L	210	.2R	190	308	390	-
14		1698	350	. 7L	210	.OR	190	308	400	
15		1438	350	.8L	210	. OR	190	359	400	
16		1438	360	1.0L	210	.OR	190	410	400	
17		1438	350	1.0L	210	.OR	190	410	400	
18		1438	350	.9L	210	.OR	190	462	400	
19	.OR	1194	350	.6L	210	, 1R	190	513	380	
20		1194	350	.3L	210	4R	190	513	400	
21	.OR	934	360	.3L	210	.3R	190	513	390	
22		934	360	.4L	210	.4R	190	564	390	
23	.OR	934	360	.4L	210	.4R	190	564	390	
24	.OR	934	360	.3L	210	.4R	210	718	390	
25	, OR	934	350	, 2L	210	.3R	190	770	390	
26	, OR	674	360	.3L	210	.2R	190	923	390	
27	. 1R	674	360	.3L	210	.3R	190	923	390	
28	. 1R	674	360	.2L	210	.3R	190	923	390	
29		430	360	.2L	210	.5R	190	1026	400	
30		430	350	.OR	210	. 70	190	1180	420	
31		430	350	. 1R	210	.8R	190	1283	460	
32		170	360	.4R	200	1.1R	190	1283	520	
33	1.4R	170	360	.6R	210	1.3R	190	1693	570	
34	1,5R	149	360	.8R	210	1.4R	190	2155	630	
35	1.7R	149	370	1.OR	210	1.5R	190	1693	560	
36	1.7R	127	360	1.OR	210	1.6R	190	1693	510	
37	1.5R	127	360	.8R	210	1.5R	210	923	450	
38		127	370	.8R	210	1.4R	190	1693	460	
39	1.2R	127	370	.7R	210	1.4R	190	923	460	
40		127	360	.5R	210	.9R	190	3848	420	
41		127	360	.2R	210	.78	190	2155	490	
42		107	360	.2L	210	.OR	150	20366	410	
43		85	350	.3L	210	.1L	140	20366	480	
44		85	360	, OR	210	.OR	150	5130	560	
45		85	360	, 1R	210	.OR	150	5130	570	

FLT	PURPOSE	- REFERENCE	PHASE I	ALT FL	N 10000	FLT DIRE	CTION - FROM	DESIRAB	LE - VOR	
	RCVR 1			RCV	R 2	RCV	R 3	RCVR 4		
DIST	СР	uv	FLAG	CP	FLAG	CP	FLAG	UV	FLAG	
1	.2L	1438	300	.2R	180	.7R	140			
2		1698	320	1.1L	190	.OR	170			
3		1698	330	.8R	190	1.7R	160			
4		1438	340	.4L	210	. 7R	180			
5		934	330	.7L	210	.2R	180			
6	1.6R	934	310	1.4R	190	2.1R	140			
7	.7R	934	330	.3R	190	1.2R	170			
8	.3L	934	350	.6L	190	.3R	180			
9	.5L	1438	350	.8L	210	.2R	190			
10	,2L	934	350	.7L	210	2R	190			
11	, 5R	1194	360	.2L	210	.6R	190			
12		1194	350	.1L	210	.7R	190			
13		1194	350	.OR	210	.9R	190			
14		1194	340	.OR	210	.9R	190			
15		934	340	, OR	210	. 8R	190			
16		934	340	.OR	210	. 7R	190			
17		934	350	.1L	210	. 7R	190			
18		934	350	.OR	210	. 7R	190			
19		934	350	.OR	200	.7R	190			
20		674	350	OR	210	.6R	190			
21		674	360	. lL	210	.6R	190			
22		674	350	.OR	210	.8R	190			
23		430	350	.OR	210	.6R	190			
24		430	350	.OR	210	.7R	190			
25		170	360	, IL	210	.6R	190	···		
26		170	360	.1L	200	.7R	190			
27		170 170	360 360	.1L	210	.6R	190 190			
28		127	360		210	.6R	190			
29		127	360	.1L .OR	210 210	.5R .6R	190			
30 31		127	360	, OR	210	.6R	190			
		127	360	.OR	210	.7R	190			
32 33		127	360	.OR	210	.5R	190			
34		107	360	.0k	210	.5R	190			
_ 35		85	360	.11	210	.6R	190			
36		107	360	, IL	210	.4R	190			
37		85	360	, 1L	190	.4R	190			
38		85	350	,OR	190	.6R	190			
39		76	350	, OR	190	.6R	190			
_ 40		76	. 350	OR	190	.5R	190			
41		76	360	,1L	190	,5R	190			
42		68	360	.OR	190	.5R	190			
43		68	360	.OR	190	.6R	190			
44		68	360	.OR	190	. 7R	190			
45		68	350	, OR	190	.6R	190			

	RCV	R.1		RCVI	R . 2	RCU	7R 3	PCVI	R 4
100 V 10 - 2				NGV R . 2		WCAW 2		RCVR 4	
IST	CP	υ v	FLAG	CP	FLAG	CP	FLAG	uv	FLAG #
1	4.4L	1698	310	3.7L	180	2.4L	140	154	390
2	2.8L	1698	320	2.5L	190	1.7L	160	205	380 🐱
3	.3L	1698	330	.3L	190	.3R	160	205	410
4	.2R	1194	340	.OR	190 -	.7R	180	205	410
5	.4R	934	340	.OR	200	.9R	180	205	400:
6	1.5R	674	330	1.1R	190	1.9R	170	205	400
7	.5R	1194	330	.1R	190	1.1R	170	205	400
8	1.3L	934	330	1.2L	190	.5L	170	205	400
9	1.2L	1438	350	1.2L	210	.5L	180	257	400
10	1.0L	1194	350	1.0L	210	.2L	190	308	400
11	.OR	1194	350	.5L		.3R	190	308 💉	400 da
12	.3R	1194	350	OR A	200	.7R	190	410	4004
13	.6R	1194	340	.1R	210	1.0R	190	359	400
14	.7R	1194	350	.2R	190	1.1R	190	410	390
15	.2R	934	340	.OR	210	.8R	180	462	400
16	.4R	934	340	.OR	210	.8R	190	513	390
17	5R	934	340	.2R	210	1.0R	190	513	390
18	.7R	934	340	.2R	210	1.0R	190	513	400
19	.5R	674	350	.1R	210	1.0R	180	667	390
20	.2R	674	350	.OR	210	.5R	190	718	390
21	.2R	674	350	.OR	210	.6R	190	770	400 -
22	.5R	430	350	.OR	210	.7R	190	770	400
23	.4R	674	350	.OR	210	.7R	190	923	410
24	.3R	430	360	.1R	200	.8R	190	1026	400
25	.3R	430	360	OR	210	.7R	190	1180	400
26	, 1R	170	350	OR	190	.6R	190	1180	400
27	.2R	170	350	.OR	210	.6R	190	1283	400
28	.3R		360 -	.1R		.7R	190	1693	420
29	. LR	149	360	.1R	210	.8R	190	1693	420
30	.4R	127	360	. IR	210	.8R	190	2155	440
31	3R	127	350	.1R	210	.6R	180	25655	470
32	.1R	127	350	.UR	210	.6R	180	2565	480
33	.2R	107	350	1R	190	.7R	160	2565	550
34	.2R	107	350	.2R	190	.5R	150	3848	570
35	1R	85	340	OR	190	OR	140	5130	590
36	.2R	76	350	.1R	190	.OR	140	3848	570
37	.1R	85	360	.1R	190	.OR	140	5130	500
38	.1R	85	350	.1R	190	.OR	130	5130	430
39	.2R	76	350	. 1R . 2R	190	.5R	170	1693	560
40	.2R	76 76	360	. 2R	190	.5R	160	2155	460
41	.1R	68	360	.1R	190	.6R	190	770	480
42		68	350	.1R		.6R	180	1026	480
42	.2R		350			. 7R	180	770	490
1 2									
43 44	.3R .OR	68 59	350	.2R 👙	190 190	.6R	180	1026	510

FLT F	PURPOSE -	TEST	PHASE I	alt fl	N 15000	FLT DIRE	CTION - TO	DESTRAB	LE - VOR	
RCVR 1				RCV	R 2	RCV	RCVR 3		RCVR 4	
DIST	CP	UV	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1	.7R	1438	330	.5R	200	1.0R	130			
2	1.0R	1698	330	. 7R	200	1.1R	150			
3	1.0R	3396	340	.5R	200	1.2R	160			
4	1.9R	1698	330	1.4R	190	1.8R	160			
5_	1,5R	1698	340	1.OR	190	1.6R	180			
6	.4R	1698	350	, 1R	200	.6R	170			
7	.5L	1438	350	.6L	200	. 1R	170			
8	.1R	1438	350	.1L	190	.4R	160			
9	.OR	1194	330	.OR	200	.3R	160			
10_	.2R	1698	330	,1R	190	,4R	140			
11	.3L	1438	340	.4L	200	.2R	170			
12	.3R	1438	350	.OR	200	.6R	180	- 1		
13	. 7R	1438	350	. 4R	200	.8R	170			
14	.4R	1438	340	.2R	200	.7R	180			
15	, 2R	1438	340	.1L	200	.5R	180			
16	. 1R . 1R	1438 1194	350 350	.2L	200	.3R	180			
17	.OR	1438	350	.1L	200	.4R	180			
18	.OR	1438	350 350	.1L	200	.3R	180 180			
19	.OR	1438	350	.1L ,1L	200 200	.4R .5R	180			
20 21	.2R	1194	360	.2L	200	.3R	190			
22	.2R	674	360	.1L	200	.5R	190			
23	. 1R	1438	360	.3L	200	.3R	190			
24	.4L	1194	360	.6L	200	.1R	200			
25	.4L	1194	370	.8L	200	.OR	190			
26	.5L	1194	370	.7L	200	.1L	200			
27	.3L	934	370	.7L	210	.OR	200			
28	.3L	674	370	.8L	210	.OR	190			
29	.2L	674	360	.6L	200	.1R	190			
30	OR	934	360	,5L	200	.3R	190			
31	. lr	934	360	.3L	200	.3R	190			
32	.JR	934	350	.OR	200	.5R	190			
33	.4R	674	350	.1R	200	.8R	190			
34	.7R	674	370	.2R	200	1.0R	190			
35	,5R	430	350	.2R	200	.8R	180			
36	.5R	430	360	.2R	200	.8R	180			
37	.5R	170	350	.2R	200	.9R	180			
38	.5R	430	350	.2R	200	.9R	180			
39	.4R	430	350	. IR	200	.7R	180			
40	.5R	430	350	.1R	200	1.0R	180			
41	.5R	430	350 350	.2R	200	1.0R	180			
42	.5R	170 170	350 350	.2R	200	1.0R	180 180			
43	.6R.	149	350 350	.2R	190	1.0R				
44	.4R .		360	.3R	200	.8R	190 180			
45	.5R	127	700	. 2R	200	1.OR	190			

FLT P	URPOSE = -	TEST	PHASE I	ALT FI	N 15000	FLT DIRE	CTION - TO	DESTRABL	E - VOR
	RCV	R 1		RCV	7R 2	RCV	7R 3	RCV	7R 4
DIST	CP	uv	FLAG	CP	PLAG	CP	FLAG	עט 🥫	FLAG
1	4.6R	1438	310	3.8R	180	3.9R	130	205	380
2	1.4R	1698	320	1.3R	180	1.5R	130	205	390
3	.3L	1693	330	.3L	200	.OR	170	205	400.
4	.1L	1693	330	.OR	200	.1R	140	205	390
5	,3L	1698	330	.2L	200	.1L	150	205	380
6	.7L	1438	350	.6L	210	.4L	180	257	390
7	1.1L	1194	370	1.0L	200	.6L	180	257	380
8	.4L	1194	350	.5L	200	.1L	170	308	390
9	.OR	1438	330	.OR	200	.2R	150	359	400
_10	1.0R	1194	340	, 7R	200	1.OR	160	359	390
11	, OR	1698	340	. OR	200	. OR	170	359	380
12	.OR	1438	350	.1R	210	. 2R	170	410	380
13	.OR	1438	350	.OR	200	.2R	170	410	390
14	.6L	1438	340	.6L	200	.4L	170	462	390
15	,5L	1438	340	.7L	200	.5L	180	513	380
16	.3L	1698	350	.5L	200	.3L	180	564	390
17	.4L.	1438	340	.3L	200	.3L	170	667	390
18	.OR	1698	330	.1L	200	.OR	170	667	390
19	OR.	1438	350	.OR	200	.2R	170	667	390
	OR	1438	350	. OR	200	.2R	170	667	380
21	. 1R	1194	340	.3L	200	, 1R	180	770	380
22	.5L	1438	360	.6L	200	.3L	180	770	390
23	.9L	1194	350	.9L	200	.7L	180	1026	390
24	.8L	1194	360	.8L	200	.5L	180	1026	390
25	.OR	934	360	.3L	200	.1L	180	923	370
26	OR	430	360	, 1L	190	.2R	180	923	390
27	.3R	430	350	. OR	190	.3R	180	1180	390
28	.4R	1194	360	. 1R	200	.3R	180	1026	380
29	. 1R	934	350	. 1R	200	.3R	170	1283	400
30	.3R	1194	35 0	, 1R	200	.3R	160	1693	420
31	.5R	934	340	, 3R	200	.4R	170	1180	460
32	.7R	430	.360	.4R	190	.6R	170	1180	480
33	1.0R	430	340	.8R	200	.7R	170	1180	500:
34	1.0R	430	350	.8R	200	1.0R	160	1026	510
35	.9R	430	350	.6R	190	1. OR	160	1283	540
36	1.0R	430	360	.5R	190	1.0R	170	2565	530
37	.7R	430	350	.5R	200	.6R	160	1693	490
38	.3R	127	350	.1R	200	.3R	160	359	420
39	. 1R	107	330	, OR	200	.2R	160	770	430
40	. 1R	430	350	, 1R	200	.3R	160	667	420
41	.3R	430	360	. 1R	390	.4R	170	667	400
41	.3R	170	340	. 2R	200	.3R	170	2565	470
42	.4R	68	350	.3R	200	.8R	150	2565	510
43	.2R	149	350	.2R	190	.5R	160	5130	500
44	.2R	149	340	.4R	190	.6R	160	2565	490

FLT	PURPOSE	- REFERENCE	PHASE I	ALT FLN	15000	FLT D	IRECT	ION - FROM	DESIRABI	E - VOR	
	RC	VR 1		RCVR	2		RCVR	3	RCV	7R 4	
DIST	CP	עע .	FLAG	CP	FLAG	CP		FLAG	υV	FLAG	
1	6.OR	1194	320	4.6R	430	6.2	R	310			
2		934	300	1.7L	180	1.3		130			
3		1194	330	.8L	170	.5		140			
4		3396	330	.3R	210	.6		140			
5	, 6R	1194	320	,3R	190	,8	R	150			
6	1.3L	1438	350	1.1L	190	.7	L	160			
7		1194	350	.9L	200	.4	L	170			
8		674	350	.OR	200	.4		170			
9		430	330	.9R	190	1.4		140			
10		674	330	.2R	190	.7		160			
11		934	330	.4L	180	.0		140			
12		1194	350	.5L	200	.0		170			
13		934 .	340	.OR	200	.3		160			
14		1194	340	.OR	200	.2		170			
15		1194	340	.1L	200	<u> </u>		170			
16		170	350	. 1L	190	.3		180			
17		1194	350	. 1L	200	.1		170			
18		1194	350	.IL	200	.1		170			
19		1194 1438	350 350	.2L	200	.3		160		•	
20		1194	350	.1L .3L	200	.3		170 170			
21 22		1194	350	.1L	200	.2		170			
23		934	350	.2L	200	.2		180			
24		934	350	.2L	200	.2		180			
25		674	360	. 1L	200	.3		170			
26		934	360	.1L	200	.3		180			
27		934	350	.iL	200	.3		170			
28		674	360	.2L	200	.2		170			
29		430	360	.3L	200	.2		180			
30		430	360	.2L	200	.2		180			
31		430	360	.1L	200	.2		180			
32	.OR	430	360	.3L	200	.2	R	180			
33	.OR	149	350	.1L	200	.1	R	180			
34	. OR	170	350	.3L	200	0	R	170			
35	OR	170	360	,1L	200	1,1		170			
36	.1L	170	370	.27	200	.2	R	170			
37		149	370	.1L	200	.0		170			
38		149	360	.OR	200	.2		170			
39		127 .	370	. 1R	190	.3		160			
40		170	350	. 1R	180	3		150			
41		127	350	.2R	190	.3		150			
42		127	350	. 1R	190	.2		150			
43		107	350	.4R	190	.4		140	•		
44		107 85	340	.OR	170	.3		150			
45	OR	6.5	340	.2R	170	,3	K	140			

FLT	PURPOSE	- TEST	PHASE I	ALT FI	N 15000	FLT DIRE	ECTION - FROM	DESTRAB	LE - VOR	
	RO	VR 1		RCV	7R 2	RCV	/R 3	RC	VR 4	
DIST	CP	įυν	FLAG	CP	FLAG	CP	FLAG	UV	FLAG	
1	2.9R	934	330	2.7R	170	2.5R	120	257	400	
2		1194	330	3.2L	170	3.3R	120	257	400	
3		1698	320	.OR	180	.1R	140	257	400	
4		1438	320	.9R	190	1.1R	140	359	400	
5		1698	330	.OR	190	.3R	150	308	400	
6		934	340	.8L	190	.8L	170	359	400	
7		1438	340	.2L	200	. OR	170	359	390	
8		430	340	. 1R	190	. 1R	160	410	410	
9		674	330	. 7R	190	.9R	140	462	410	•
10	•	674	340	. 1R	200	.5R	160	462	400	
11		934	310	.OR	190	,2R	140	462	390	
12		934	330	.5L	190	.1L	160	513	400	
13		1438	330	.OR	200	.1R	170	564	390	
14		934	340	.1R	200	.2R	170	667	410	•
15	OR	1194	340	, OR	200	, 1R	180	564	410	
16	.OR	934	340	.OR	200	. 1R	170	564	400	
17	.OR	934	350	.2R	200	. 1R	200	667	400	
18	.3R	934	350	.2R	200	.4R	180	718	400	
19		1194	340	.2R	210	.3R	180	770	410	
20		934	340	,2R	200	.2R	180	923	400	
21		1194	350	. 1R	210	. 1R	180	1026	400	
22		934	360	.OR	210	. 1R	180	1026	390.	
23		1194	350	, OR	230	.1R	170	1283	390	
24		934	350.	. 1R	200	.2R	180	1283	410	
_ 25		934	360	, OR	200	.1R	180	1693	470	
26		674	360	.OR	200	. 1R	180	1693	400	
27		674	350	.OR	200	. 1R	180	1283	390	
28		934	3 60 350	.1L	190	. 1R	190	2155 2155	400	
29 30		674 674	350	.1L .OR	190 200	.2R .2R	190 180	2565	400 410	
$-\frac{30}{31}$		934	360	.OR	200	.2R	170	2565	390	
32		430	370	.OR	200	. 1R	170	3848	400	
33		674	370	.OR	190 .	.1R	180	3848	390	
34		430	340	.2R	200	.4R	170	2565	410	
35	-	149	360	, 1R	200	.3R	170	3848	420	
36		170	350	.OR	200	.3R	170	2565	420	
37		170	360	, OR	190	.3R	160	3848	440	
38		149	360	.OR	200	.3R	170	1693	580	
39		149	340	.2R	190	.2R	170	2565	650	
40		127	360	.1R	180	.1R	170	564	440	
41		85	350	.3R	180	.4R	150	1283	540	
42		127	350	.4R	190	.4R	160	718	530	
43		107	350	.5R	190	.5R	160	1693	480	
44		68	340	.2R	180	.4R	140	2565	430	
45		68	370	.OR	150	.1R	130	1283	450	

END OF PHASE I LISTING

9. TABULATION OF FLIGHT DATA-PHASE II

FLT	PURPOSE	- REFERENCE	PHASE II	ALT FLN	500	FLT DIR	ECTION - TO	DESTRAB	LE - LOC	
	R	CVR 1	•	RCV	R 2	RC	VR 3	RC	VR 4	
DIST	CP	uv	PLAG	CP	FLAG	CP	PLAG	uv	FLAG	
1	.3k	5110	380	.5R	160	.2R	250			
2	. 1R	3406	390	. 1R	150	. OR	260			
3	. 1R	1703	380	. 1R	140	.OR	250			
4	.1L	1197	390	.OR	140	, 1L	260			
5	.1L	676	390	.OR	120	, lL	260			
6	.2R	170	390	.2R	120	.1R	240			
7	. 1R	137	390	.1R	110	.OR	240			
8	.2R	120	390	.2R	100	. 1R	230			
9	. 1R	86	380	. 1R	100	. 1R	240			
10	.2L	67	380	.2L	90	.2L	250			
11	.1L	52	390	.1L	90	.1L	240			
12	.2R	43	390	.2R	80	. 1R	210			
13	.lL	38	390	. 1R	80	.1L	230			
14	.IL	31	400	.OR	70	.1L	220			
15	, OR	22	390	, OR	60	.1L	200			
16	.1L	17	390	.1L	50	.1L	200			
17	.1L	17	390	.1L	50	.1L	190			
18	.lL	. 14	380	.OR	40	.3L	190			
19	.1L	10	390	.OR	40	.OR	140			
20	.2L	10	390	, 1R	20	, OR	100			
21	.2L	7	380	.OR	20	, OR	50			
22	.2R	7.	470	. 1R	20	.1R	40			
23	. 1R	5	480	.OR	20	.1R	30			
24	.2L	7	380	, OR	0	.OR	20			
25	.2L	2	370	, OR	10	, 1R	00			
26	.3L	2	350	, OR	10	.OR	0			
27	.3L	2	330	, OR	0	.1L	0			
28	.2L	2	320	.OR	10	.OR	0			
29	.4L	2	310	.OR	0	.OR	0			
30	,3L	2	280	, 1R	0	OR	0			

FLT:	PURPOSE .	- TEST	PHASE II	ALT FL	N 500	FLT DIR	ECTION - TO	DESIRA	BLE - LOC
	RC	/R 1	•	RC	VR 2	RC	VR 3	RC	CVR 4
DIST	CP	UV	FLAG	CP	FLAG	CP	FLAG	uv	FLAG
1	.3L	5110	390	.3L	150	.2R	300	50	0
2	.2R	3406	380	.3R	150	.2R	250	50	10
3	.2L	1703	390	.2L	150	,2L	280	50	10
4	.2R	1197	380	.3R	140	.1R	240	50.	20
5	.OR	938	380	. OR	120	.11	260	50	40
6	.2L	432	390	.2L	120	.2L	270	50	70
7	.OR	137	390	.OR	110	.OR	240	50	110
8	.2R	103	390	.2R	110	.1R	230	50	150
9	. 1R	86	390	. 1R	90	. 1R	230	50	170
10	.2L	74	390	,2L	90	,2L	250	50	180
11	, OR	55	390	, 1R	90	.OR	230	50	210
12	.lL	43	390	.1L	80	.2L	230	50	210
13	.1L	43	380	. lL	80	.lL	220	104	220
14	.OR	31	390	.1R	70	.lL	220	154	240
15_	, OR	24	400	. 1R	60	, 1L	210	154	250
16	.2L	22	400	, lL	60	, lL	200	204	270
17	.OR	14	400	.OR	40	.OR	170	258	270
18	.2L	14	390	.2L	40	.2L	150	412	280
19	.2L	12	380	.1L	30	.2L	120	720	290
20	,2L	10	380	, 1L	40	.1L	50	1028	290
21	. 1L	7	390	, OR	10	.OR	10	2572	290
22	.lL	7	310	. 1R	0	. OR	0	16721	310
23	.1L	7.	150	.OR	0	. 1R	0	28297	290
24	.OR	10	* 40	.OR	0	.1R	0	51449	280
25	, 1L	5	220.	, OR	0	, OR	0	16721	280
26	.2L.	2	310	.OR	0	.OR	0	3243	270
27	.3L	2	290	.OR	0	.OR	0	1182	270
28	.3L	2	280	.OR	0	, OR	0	720	270
29	.3L	2	240	.OR	0	.OR	0	462	260
30	, lL	. 2	240	, OR	10	, OR	0.	362	260

FLT	PURPOSE	- REFERENCE	PHASE II	ALT FL	N 1000	FLT DIR	ECTION - TO	DESTRA	BLE - LOC	
	RC	VR 1 .	•	RC	VR 2	RC	VR 3	Re	CVR 4	
DIST	CP	UV	FLAG	CP	FLAG	CP	FLAG	UV	FLAG	
1	.4R	5110	380	.6R	130	.3R	250			
2	.1R	5110	380	.3R	130	.1R	270			
3	.1R	3406	380	.2R	130	, 1R	260			
4	.2L	1703	380	.2L	130	.2L	280			
5_	OR	1703	380	OR	120	OR	260			
6	.1L	1197	380	.1L	120	.5L	270			
7	, OR	938	390	.1L	110	.1L	260			
8	.1R	676	380	.1R	110	.OR	250			
9	.1R	432	380	. 1R	110	.1R	250			
10	.OR	137	390	.OR	100	.1L	250			
11	.1L	120	390	.2L	90	.1L	250			
12	.OR	103	380	. 1R	90	.OR	250			
13	.1R	86	390	.2R	90	. 1R	240			
14	.1L	74	400	. OR	80	. 17.	240			
15	.11	87	400	.1L	70	, 1L	240			
16	.1R	55	390	. 1R	70	.OR	240			
17	.1R	43	390	.1R	70	, OR	230			
18	, 1R	43	400	. OR	70	.OR	220			
19	. 1R	34	390	.1L	60	.1L	240			
20	2 <u>L</u>	31	400	.11.	60	. lL	240			
21	.OR	26	400	.OR	50	.OR	230			
22	. 1R	22	400	. 1R	50	.OR	200			
23	.OR	19	390	. 1R	60	.OR	210			
24	. 1R	17	400	. 1R	40	.1R	200			
25_	11.	14	400	.1L	30	.1L	200			
26	.2L	14	390	. 1L	30	.21.	190			
27	.OR	10	390	. 1R	30	.OR	170			
28	.2L	10	380	.1L	20	.1L	170			
29	.2L	10	380	.2L	10	.1L	160			
30_	.11.	10	380	OR	20	.11.	150			

FLT	Purpose	- TEST	PHASE II	ALT FL	1000	FLT DI	RECTION - TO	DESTRAI	BLE - LOC
	R	CVR 1		RCT	VR 2	R	CVR 3	RO	CVR 4
DIST	CP	ָיעע	FLAG	CP	FLAC	CP	FLAG	υv	FLAG
1	.1L	5110	380	. 1R	130	.1L	280	50	130
2	.OR	5110	380	.OR	140	. lL	270	50	150
3	.OR	3406	390	.1R	140	.OR	270	50	170
4	.OR	1703	380	. 1R	130	.OR	270	50	180
5	.1R	1442	390	. lR	130	. OR	250	70	200
6	.OR	1197	390	, OR	130	.OR	260	50	210
7	.2R	938	390	.2R	120	.2R	240	104	230
8	.2R	432	390'	.3R	120	1R	240	104	230
9	.1R	170	390	.1R	110	. 1R	240	154	240
10	.OR		390	.1L	100	.OR	250	154	260
11	. IR		400	. IR	100	.OR	240	204	270
12	.1R		390	.2R	100	. 1R	240	204	280
13	.2L		390	.1L	100	.2L	260	258	280
14	.OR		400	. 1R	90	.OR	240	362	300
15	, 1R	62	400	1R	80	OR	230	462	310
16	, IR	50	400	.1R	80	.OR	230	670	310
17	.OR	50	400	.OR	80	. OR	230	924	310
18	.OR	50	400	. 1R	70	.OR	220	1182	310
19	.OR	34	390	. 1R	70	. OR	210	2264	300
20	.OR	31	390	. 1R	70	, OR	180	3859	300
21	.11	26	390	, OR	60	.OR	120	5145	300
22	.1R	22	360,	. 1R	40 `	.OR	40	28297	310
23	.OR	22	240	, OR	20	. OK	0	39873	300
24	.OR		230	.OR	10	.OR	0	51449	280
25	, 1L	14	260	.OR	0	, OR	0	39873	290
26	.2L	14	350	. 1L	10	. 1L	20	16721	290
27	.11	12	360	, OR	20	.1L	40	4529	290
28	.2L	10	370	. OR	30	.1L	40	3859	290
29	.2L	10	380	.lL	20	.1L	70	2264	280
30	.2L	10	390	. 11.	20	. 11.	90	1286	280

FLT	PURPOSE	- REFERENCE	PHASE II	ALT FLN	2000	FLT D	IRECTION - TO		BLE - LOC	
	R	CVR 1	•	RCV	R 2	i	RCVR 3		CVR 4	
DIST	CP	uv .	Tlag	CP	FLAG	CP	FLAG	. עע	PLAG	
1	.1R	5110	390	.2R	140	.1R	260			
2	.6R	5110	380	.8R	140	.4R	230			
3	.2R	5110	380	.3R	130	.2R	250			
4	.3R	3406	380	.4R	140	.2R	240			
5	, 3R	1703	380	,3R	140	.2R	240			
6	.2R	1703	380	.3R	130	.2R	250			
7	. 1R	1197	380	. IR	130	.1R	250			
8	.1R	1197	390	. 1R	130	.1R	250			
9	.1R	938	390	.2R	110	. 1R	250			
10	.1R	676	380	, 1R	120	, OR	250			
11	.2L	676	390	.2L	110	. 1L	260			
12	.OR		390	.OR	110	.1L	250			
13	.1R	170	390	. 1R	100	.1R	250			
14	.1R	154	380	.1R	110	. 1R	240			
15	,1R	137	390	, 1R	100	• OR	240			
16	.OR	120	380	. 1R	100	.OR	250			
17	,1L	103	390	. IL	100	. 1L	250			
18	.2L	86	390	.1L	90	.2L	250			
19	.1L		380	. 1L	90	.1L	240			
20	,2L		390	,1L	90	.2L	250			
21	.1L	55	390	. 1L	80	. 1L	240			
22	.OR	50	390	.OR	70	. 1L	230			
23	.1R		390	. 1R	70	. 1R	220			
24	.2R		390	.2R	80	.1R	210			
25	, 1R	34	390	, 1R	60	, 1R	220			
26	. 1R	31	390	. 1R	60	.OR	220			
27	.OR		390	.OR	60	.OR	220			
28	. 1R		390	. 1R	60	.2R	210			
29	.OR		390	.OR	50	. 1L	210			
30	.2L	22	390	, IL	60	. 1L	220			

					7.0		D.C	vm 2	RCVI	
	RC	/R 1			RC	VR 2	KU	CVR 3	RCVI	(4
IST .	CP	υv	45	YLAG	CP	FLAG	CP	FLAG	uv	FLAG .
1	, 1R	5110		380	.3R	140	. 1R	260	50 -	210
1 2	. 1R	5110		390	.3R	140	.1R	270	50	220
3	.1R	3406		380	.2R	140	.1R	270	104	240 ·
	.2R	3406		380	.3R	140	.2R	250	154	250 .
7	.2R	1703		380	.3R	140	.1R	240	154	260
6	.1R	1703	-	380	.2R	130	.1R	260	154	270
7	. 2R	1197		390	.4R	130	.2R	250	204	270
8	.3R	1197		380	.3R	130	.2R	240	204	280
9	.2R	938		390	.2R	120	.1R	240	258	290
10	.2R	676		390	.2R	120	.1R	240	308	300 **
11	.3R	432		380	.3R	110	.ZR	240	412	300
12	.2R	170		390		. 110	.1R	230	412	310
13	.2R	154		380	.2R	110	, 1R	240	462	310
14	, 1R	137		390 -	.1R	100	.1R	250	670	300
15	. 1R	137		390	, 1R	100	.1R	240	874	310
16	.1R	103		390	, 1R	100	.IR	230	1028	310
17	OR	86		390	.1R	96	.1L	240	1594	300
18	OR	86		400	.OR	80	.lL	240	2264	310
19	, 1R	74		390	.1R	90	.OR	230	3859	300
20	.11.	67		390	11.	80	.1L	220	4529	290
21	.OR	62		390	.OR	80	. OR	200	5145	290
22	.OR	50		400	.OR	80	.1L	220	3243	280
23	.OR	43		390	. 1R	70	.1L	80	5145	280
24	.OR	43		370	.OR	60	.OR	70	39873	290
25	.11.	34		380	OR	50	.1L	70	39873	280
26	.1L	31		370	.OR	60	,1L	90	28297	280
27	. 1L	31		390	.11.	60	.1L	120	5145	280
28	.2L	26		390	, 1L	60	, 1L	140	4529	280
29	.21	24		390 "11	.lL	50	.1L	150	3243	270
30	.2R	. 17.		400 %	3k	70	.2R	130	2572	280

FLT	PURPOSE	- REFERENCE	PHASE II	ALT FL	3000	FLT DIR	ECTION - TO	DESTRA	BLE - LOC
	R	CVR 1		RCT	/R 2	RO	VR 3	R	CVR 4
DIST	CP	υv	FLAG	CP	FLAG	CP	FLAG	υv	FLAG
1	.4R	5110	390	. 7R	140	.3R	260		
2	.1L	5110	390	.2L	130	.2L	320		
3	. 1R	5110	3 9 0	.3R	140	. 1R	290		
4	2.1	5110	390	.3R	140	.1R	280		
5	, 1R	3406	390	.2R	140	, OR	280		
6	.1L	1703	400	.1L	140	.2L	300		
7	. 1R	1703	380	.2R	130	. 1R	290		
8	.2R	1442	400	.2R	130	.2R	270		
9	. 1R	1442	390	.2R	130	.1R	270		
10	, 1R	1197	400	,3R	130	, 1R	270		
11	. 1R	1197	390	. 1R	120	. 1R	270		
12	.2R	938	390	.3R	110	. 1R	270		
13	.2R	676	390	.3R	120	.2R	260		
14	, 1R	676	400	.1R	110	. OR	270		
15	, OR	170	400	, 1R	110	,1L	280		
16	.OR	170	400	.2L	100	, lL	270		
17	. 1R	170	400	.2R	110	.1R	270		
18	. 1R	154	400	. 1R	100	.1L	260		
19	.OR	137	400	.lR	100	.1L	270		
20	, OR	120	380	, or	100	.1L	270		
21	. 1R	103	390	. IR	100	.OR	250		
22	. 1R	86	39,0	.2R	90	. 1R	260		
23	. 1R	86	400	.2R	90	.1R	260		
24	.OR	79	390	. 1R	90	.1L	270		
25	. 1R	74	400	, 1R	90	, OR	260		
26	. 1R	62	400	. 1R	90	. OR	250		
27	. 1R	62	400	.1R	80	.1R	260		
28	.2L	50	400	.2L	70	.2L	260		
29	. il	43	400	.1L	60	.2L	260		
30	,3L	34	410	.3L	70	.3L	270		

FLT	PURPOSE	- TEST	PHASE II	ALT FL	N 3000	FLT DIR	ECTION - TO	DESTRA	BLE - LOC	
	R	CVR 1		RC	VR 2	RC	VR 3	Ro	CVR 4	
DIST	CP	שט	FLAG	CP	FLAG	CP	FLAG	υv	FLAG	
1	, 6R	5110	400	.9R	150	.4R	250	154	250	
2	. 1R	5110	400	.4R	160	.1R	290	204	260	
3	. 1R	5110	390	.4R	150	.1R	290	204	260	
4	. 2R	5110	390	.4R	140	.2R	280	204	280	
5	.3R	5110	390	.4R	150	.3R	270	258	280	
6	. 2R	3406	400	.2R	140	.2R	280	308	270	
7	.2R	1703	400	.2R	140	.2R	280	308	280	
8	.2R	1703	390	.3R	130	.2R	270	362	300	
9	.1R	1442	400	.1R	140	.1R	290	412	290	
10	.OR	1197_	400	.OR	130	,1L	280	462	290	
11	.OR	1197	400	.1R	130	.lL	280	566	280	
12	.1R	938	400	.OR	120	.1R	270	720	280	
13	.OR	676	400	.OR	120	.1L	280	.874	300	
14	.2R	432	400	.2R	120	.lR	260	1028	300	
15	, OR	423	400	.OR	110	.1L	280	1286	300	
16	.OR	170	400	.2L	120	, 1L	270	1594	290	
17	.1L	170	400	.2L	110	.2L	280	2264	290	
18	.1R	154	410	. 1R	110	.OR	270	3243	290	
19	.1R	137	400	.OR	100	.1R	260	3859	300	
20	, OR	120	410	.1R	100	.OR	260	3859	290	
21	. IR	103	400	.1L	90	.OR	260	2264	280	
22	.1L	86	400	.lL	100	.2L	260	3859	310	
23	.OR	86	410	.1L	80	.1L	160	28297	260	
24	.OR	74	390	.1L	70	.1L	150	28297	290	
25	.OR	74	400	, 1L	90	.1L	200	5145	280	
26	.1R	67	400	.1R	80	.OR	150	28297	280	
27	.3L	62	400	.2L	80	.2L	180	16721	290	
28	.2L	50	410	.3L	80	.2L	190	5145	280	
29	.1L	43	400	. IR	70	.OR	200	3859	290	
30	.3R	38	400	.3R	80	.2R	190	3243	280	

FLT	PURPOSE	- REFERENCE	PHASE II	ALT FL	N 4000	FLT DIE	ECTION - TO	DESIRA	BLE - LOC
	RC	VR 1	•	RO	VR 2	RC	CVR 3	R	CVR 4
DIST	CP	υ v	FLAG	CP	FLAG	CP	FLAG	υ ν	FLAG
1	.2L	5110	380	.1L	100	.2L	290		
2	.OR	5110	*400	.3R	110	.OR	280		
3	.1L	5110	390	.3R	110	.1L	270		
4	.3R	5110	400	.5R	120	.2R	260		
5	.1R	5110	370	.1R	120	. 1R	260		
6	.1L	1703	390	.1R	130	.1L	270		
7	.2L	3406	380	.OR	120	.1L	270		
8	.1R	1703	390	.2R	120	. 1R	260		
9	.1L	1703	390	.21	120	.1L	270		
10	.OR	1442	390	.1R	120	.OR	260		
11	.1R	1197	390	.2R	120	.1R	250		
12	.OR	1197	390	.OR	110	.1L	270		
13	.1R	1197	390	.1R	120	. 1R	250		
14	.OR	676	390	.1L	110	.1L	260		
15	.1R	676	400	.1R	120	.1R	250		
16	.1R	432	390	.1R	120	1R	250		
17	.2R	432	390	.3R	120	.2R	240		
18	.1R	170	390	.2R	110	.1R	240		
19	.OR	170	390	.1R	110	.OR	250		
20	.1L	154	390	.OR	110	.1L	250		
21	.OR	137	370	.1R	110	.OR	250		
22	.1L	137	390	.OR	110	.1L	250		
23	.1L	137	380	.OR	90	.1L	250		
24	.1L	120	390	.1L	100	.1L	250		
25	.1L	120	390	.1L	100	.11	250		
26	.1R	86	390	.1R	100	.1R	240		
27	.OR	79	390	.1L	90	.1L	240		
28	.2L	79	390	.1L	90	.1L	250		
29	.OR	67	390	.1R	100	.OR	230		
30	.2R	67	380	.3R	100	.2R	230		

TLT	PURPOSE	- TEST	PHASE II	ALT FL	N 4000	FLT DIR	ECTION - TO	DESIRA	BLE - LOC	
	RC	VR 1	•	RC	VR 2	RC	EVR 3	R	CVR 4	
DIST	СР	טְּי	FLAG	СР	FLAG	CP	FLAG	UV	FLAG	
1	. 1R	5110	360	.3R	80	.1R	270	258	300	
2	.IR	5110	390	.4R	120	. 1R	270	258	300	
3	. 1R	5110	370	.4R	90	. 1R	260	308	310	
4	.2R	3406	380	.3R	100	.1R	260	362	300	
5	.3R	3406	380	.4R	100	.2R	250	412	310	
6	.1R	3406	370	.3R	120	, 1R	260	412	310	
7	.1R	938	380	. 1R	110	. 1R	260	462	310	
8	.1R	3406	370	.3R	110	. 1R	260	462	330	
9	, OR	3406	37 6	.3R	120	.OR	260	670	320	
10	.11	3406	370	. 1R	110	.1L	270	670	320	
11	.OR	1703	370	. 1R	110	.1L	270	924	330	
12	. 1R	938	380	. 1R	120	. 1R	260	924	330	
13	.OR	938	380	.2R	110	.OR	270	1286	310	
14	.OR	938	390	.2R	110	. 1R	260	1594	320	
15	OR_	676	380	. 2R	110	.1R	273	1594	330	
16	. 1R	676	390	. 2R	110	.1R	260	1594	310	
17	.2R	432	390	.2R	120	.1R	250	2264	300	
18	.OR	170	400	.1R	120	.OR	260	2572	300	
19	.OR	154	400	.1L	110	.1L	270	3243	310	
20	.OR	154	390	. 1R	110	.1L	260	2264	320	
21	.OR	154	390	. 1R	110	.1L	250	1594	330	
22	.1R	137	390	.OR	100	.OR	240	16721	310	
23	.OR	137	. 390	.OR	110	.OR	250	5145	330	
24	.OR	120	390	. 1L	100	.1L	210	16721	350	
25	, OR	103	400	, OR	110	, OR	260	4529	360	
26	.OR	86	390	.OR	100	.OR	240	5145	340	
27	.OR	79	400	.OR	100	.OR	230	5145	330	
28	.OR	79	400	.OR	90	.OR	220	452 9	320	
29	.1R	62	410	.3R	90	.1R	200	2264	310	
30	.6R	67	400	.6R	120	.4R	200	4529	310	

FLT	PURPOSE	- REFERENC	E PHASE II	ALT PL	พ 5000	FLT DIE	ECTION - TO	DESIRA	BLE - LOC
	RC	VR 1	•	RC	VR 2	RC	EVR 3	R	CVR 4
DIST	CP	ųv	1'IAG	CP	FLAG	CP	FLAG	UV	PLAG
1	.6R	5 i 10	390	. 7R	150	.4R	240		
2	1.0R	5110	410	1.4R	140	. 7R	200		
3	.2R	5110	410	.3R	150	. 1R	270		
4	.OR	5110	400	. 1R	130	.OR	270		
5	, OR	5110	400	. 2R	140	, OR	290		
6	.1R	5110	400	. 1R	140	.OR	270		
7	.OR	5110	400	.OR	130	.OR	280		
8	.1R	5110	410	.2R	140	.OR	260		
9	. 1R	5110	410	. 1R	130	.OR	260		
10	, 5R	3406	390	.6R	140	, 3R	230		
11	. 2R	1703	400	.3R	130	. 1R	250		
12	.2R	1703	400	.2R	120	. 1R	250		
13	.1R	1197	410	. 1R	140	, OR	270		
14	.OR	1197	390	.lL	120	, OR	270		
15	.1L	1197	410	, lL	130	.1L	260		
16	.1R	1197	410	. 2R	120	.OR	240		
17	.OR	676	400	.OR	100	.OR	250		
18	. 1R	938	390	, OR	110	.OR	250		
19	.OR	432	410	. 1R	110	.OR	260		
20	. lL	170	410	.OR	100	, 1L	260		
21	.lL	170	400	. OR	110	.OR	250		
22	.OR	154	410	. 1R	110	.OR	250		
23	.OR	154	410	.OR	100	.1L	240		
24	.1L	137	410	.OR	100	.OR	250		
25	.11_	137	400	,CR	90	, OR	250		
26	.OR	120	410	/ .1R	100	.OR	250		
27	.OR	120	410 -	.JR	100	. 1L	250		
28	.OR	103	400	.UR	90	.OR	240		
29	. 1R	86	400	.OR	90	.OR	240		
30	, lL	86	410	.OR	80	,1L	240		

ELT	PURPOSE	- TEST	PHASE II	ALT FLN	5000	FLT D	IRECTION - TO	DESIRA	BLE - LOC	
	RC'	VR 1	à	RCV	R 2		RCVR 3	R	CVR 4	
		4								
DIST	CP	עע	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1	.2R	5110	410	.1R	140	.OR	280	308	290	
. 2	.2R	5110	410	.5R	160	. 1R	270	308	. 290	
_ 3	.1R	5110	390	. 1R	150	.1R	280	308	300	
4	. 1L	5110	390	. 1R	150	4. 1L	290	412	270	
5	.3R	5110	410	.4R	150	, 1R	250	412	300	
6	.3R	5110	400	.5R	140	.1R	260	462	290	
7	.OR	-5110	410	.1R	130	.OR	280	462	300	
8	.1L	5110	390	.OR	130	.OR	290	566	.300	
9	.OR	5110	410	.1R	130	.OR	270	.720	290	-
10	. 1R	1703	410	.2R	140	.OR	270	770	300	
11	, OR	3406	410	. 2R	140	.OR	270	924	-290	
12	.2R	1442	410	.3R	140	.1R	270	1028	310	
13	.1R	1197	420	.1R	120	.OR	260	1286	280	
14	.OR	1197	410	.OR	120	.1L	280	1594	290	
15	. 1L	1197	410	.OR	120	, 1L	270	1957	280	
16	, lL	1197	400	. 1L	120	.2L	280	2264	310	
17	.1L	938	400	.1L	120	.1L	270	2572	280	
18	.1L	938	410	.1L	110	.1L	280	3243	310	
19	.OR	676	420	.OR	110	.OR	250	2572	280	
20	. OR	432	400	.OR	100	, 1L	280	1594	280	
21	. OR	432	410	. OR	100	. 1L	260	2264	290	
22	. OR	170	. 410	. 1R	110	.OR	260	16721	280	
23	. 1R	154	400	. 1R	100	.OR	260	4529	280	
24	. 1R	154	41.0	.1R	90	.1L	180	39873	250	
25	.2L	137	420	,3L	100	.2L	240	16721	310	
26	. OR	137	420	. 1R	100	. lL	270	4529	320	
27	.OR	103	420	.OR	90	. 1L	240	5145	290	
28	. 1R	120	410	. 1R	110	.OR	240	5145	280	
29	. 1R	103	410	.1R	100	.OR	240	16721	290	
30	, 2R	103	400	.1R	90	.1R	230	4529	-280	

FLT	PURPOSE ·	- REFERENC	E PHASE II	ALT FL	N 10000	PLT DIE	ECTION - TO	DESIRAE	LE - LOC	
	RC	7R 1	•	RC	VR 2	RC	EVR 3	RC	VR 4	
DIST	CP	บง	FLAG	CP	FLAG	CP	FLAG	υv	FLAG	
D101	-	•	. 1110	O.	2 2210	O.	LINO	•	12.0	
1	.8L	3406	# 410	.5L	160	.5L	280			
2	. 1R	5110	420	.2R	140	.OR	280			
3	.1L	5110	410	.OR	150	.1L	290			
4	. 1L	5110	390	.OR	140	.1L	280			
5	.2R	3406	400	.3R	140	. 1R	270			
6	, 1R	5110	390	.3R	140	OR	260			
7	.2R	3406	400	.3R	120	. 1R	260			
8	.2L	3406	400	.OR	130	.2L	290			
9	.2L	5110	400	.OR	140	. 11.	290			
10	.OR	5110	400	. 1R	130	.OR	260			
11	.2R	3406	400	.4R	140	, 1R	250			
12	.2R	1703	400	.3R	130	. 1R	240			
13	. 1R	1703	400	.2R	130	.1R	270			
14	.OR	1703	400	. 1R	120	.OR	270			
15	, 1R	1703	390	. 1R	120	.OR	280			
16	. 1R	1442	400	. 1R	120	, OR	270			
17	.1L	1197	420	.OR	120	.1L	270			
18	.OR	1197	410	.1R	110	.OR	270			
19	. 1R	1197	400	. 1R	120	.OR	260			
20	. 1R	1197	400	.2R	110	, OR	270			
21	.2R	938	400	.2R	110	.lR	250			
22	.OR	938	390	. 1R	100	.OR	260			
23	. 1R	1197	400	. 1R	100	.OR	260			
24	.1L	938	400	, OR	100	.1L	270			
25	. 1L	676	400	.1L	110	.1L	280			
26	.OR	432	410	. OR	100	.1L	270			
27	. 1L	432	400	.1L	100	.1L	260			
28	.1L	432	400	.OR	120	. 1L	270			
29	.2L	170	400	.1L	100	.2L	270			
30	, 1L	170	400	.1L	110	.2L	270			

FLT	PURPOSE -	- TEST	PHASE II	ALT FL	N 10000	FLT	DIRECTIO	ON - TO	DESIR	ABLE - LOC	
	RC	/R 1 ′		RC	VR 2		RCVR 3			RCVR 4	
DIST	СР	UV.	FLAG	CP	FLAG	CP	F	LAG	UV	FLAG	`
1	.8L	5110	410	.7L	140	.61	L 24	40	516	300	
2	.4R	5110	410	.5R	150	.2		70	462	3.10	
3	.1L	5110	400	. IR	150	.11		90	516	280	
4	.OR	5110	410	.2R	140	.11		30	720	290	
5	.2L	5110	400	.OR	140	. 1	L 29	90	720	310	
6	.OR	5110	400	.1R	140	.01	R 20	50	770	280	
7	.2R	5110	400	.4R	140	. 11	R 26	50	874	300	
8	.2R	3406	410	.3R	130	.01	R 20	50	770	280	
9	.1R	5110	410	.1R	130	.11	L 29	0	924	.310	
10	, 1R	3406	420	.1R	120	. 11	L 2	70	924	29.0	
11	.2L	3406	400	.1L	130	.11	L 29	0	1182	300	
12	.1L	5110	420	.OR	130	.11	L 29	0	874	.290	
13	.OR	3406	40 0	. 1R	120	.01	R 25	30	1182	300	
14	.1L	1703	400	.OR	130	. 11	L 28	30	1182	300	
15	, OR	1703	460	.1R	130	. 11	2	70	770	290	
16	.OR	1703	400	. 1R	130	.01	R 28	30	874	290	
17	.1L	1197	400	.OR	130	. 11	L 29	0	516	290	
18	.1L	1197	410	.OR	120	. 11	2	70	412	310	
19	.1R	1442	410	.2R	120	. 11	26	50	720	320	
20	,2R	1197	410	.2R	120	,01	2 :	50	2264	290	
21	. OR	1197	410	.1R	120	.01	2	70	3243	310	
22	.1L	938	400	, IR	110	. 11	L 27	70	4529	270	
23	.OR	676	410	.1R	120	.11	L 26	50	2572	300	
24	.OR	938	400	.1R	110	. 11	. 27	70	16721	200	
25	.lL	432	400	.OR	110	. 11		10	28297	320	
26	.OR	432	410	.2L	110	. 11	26	30	3859	300	
27	.2L	432	410	.1L	110	.11			3243	.300	
28	.2L	432	420	.2L	100	. 21	L 28	30	.2264	320	
29	.2L	-432	410	.1L	110	.21			1957	350	
30	. OR	170	410	.OR	120	.01	2 2	w	2572	290	

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FLT	PURPOSE ·	- REFERENCE	PHASE II	ALT FL	N 15000	PLT DIR	ECTION - TO	DESTRA	BLE - LOC	
	RC	VR 1		RC	VR 2	RC	VR 3	R	CVR 4	
DIST	CP	υv	PLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1	1.3L	3406	390	1.5R	130	1.5L	230			
2	.4R	3406	390	.5R	120	.3R	260			
3	.2L	5110	390	.2L	130	.2L	310			
4	.2L	3406	400	.2L	130	.2L	300			
5	, ll	3406	400	.3R	140	.2L	290			
6	, lL	3406	400	.2R	140	.2L	300			
7	. 1L	3406	390	.2R	130	.1L	290			
8	. 1R	1703	400	.2R	120	.1L	270			
9	.2L	3406	400	.2L	140	.2L	300			
10	.2R	3406	390	.3R	120	. 1R	270			
11	. lL	3406	390	.OR	130	.2L	290			
12	. 1L	3406	400	.2R	120	.1L	280			
13	. 1R	1703	400	.3R	120	. OR	280			
14	. IL	1703	400	.2L	120	.2L	300			
15	.1L	1703	400	.2L	120	.2L	280			
16	, 1R	1703	390	.2R	110	.OR	280			
17	. 1R	1442	400	.2R	120	.OR	280			
18	.1L	1442	400	.1L	120	.2L	280			
19	.2L	1197	400	.3L	100	.2L	290			
20	.1L	1197	390	.2L	110	2L	290			
21	.lL	1197	390	. 1L	110	.2L	280			
22	.2L	1197	390	.3L	100	.3L	290			
23	. lL	938	400	.2L	110	.2L	290			
24	.1L	938	390	.2L	100	.1L	280			
25	.OR	938	390	, 1R	100	,1L	270			
26	, 1L	938	400	, 1L	390	.1L	270			
27	.1L	676	390	.2L	100	.2L	280			
28	.1L	676	390	.2L	90	.2L	280			
29	.2L	676	390	.2L	100	.2L	280			
30	,2L	676	390	.3L	100	,2L	280			

FLT.	PURPOSE	- TEST	PHASESTILE	alt fi	N a 15000 ac	PLT DIE	vection - to:	DESTRAB	LE - LOC
	RC	7R"1		RO	CVR 2	RC	CVR 3	RC	VR 4
DIST	CP	υ γ .	FLAG	CP	FLAG	CIP:	Plag	UV ,	FLAG-
1	1.8L	5110	400	1.8L	160	1.9L	200	462	250
2 -	.3R	3406	400	.4R	140	.3R	260	516	270
3	.1L	5110	400	.3L	130	.2L	290	516	270
4	.2L	5110	390	.3L	140	.2L	300	566	250
5	, OR	3406	390	.3R	150	,1L	290	566	260
6	.2L	5110	400	.2L	150	.2L	300	720	270
7	.2L	3406	400	.2L	130	.2L	300	720	260 <
8	.2L	5110	390	.2L	130	.2L	300	720	260:
9	. 1L	3406	390	. 1R	130	.2L	300	670	260
10.	, OR	5110	390	.3R	130	.1L	280	670	270
11	.1L	3406	390	. 1R	130	.2L	280	670 8	270
12	.1L	3406	390	.2R	140	.2L	290	I16 🗈	250
13	.11	1703	400	. 2R	120	.2L	290	412 .	250
14	.OR	1442	400	.1R	130	.2L	280	308	250-
15	.OR	1703	400	.3R	130	, 1L	280	308	270
16	.OR	1703	400	.2R	12G	.1L	280	412	280 *
17	.OR	1703	400	.2R	110	.1L	270	516	270
18	.1R	1442	390	.2R	120	.OR	270	924	260
19.	. IR	1197	410	. 1R	110	. 11.	280	1594	260
20	.2L	1442	420	.2L	110	.3L	300	2572	270
21	.2L	1197	400	.2L	110	.2L	280	2264	250
22	.OR	1197	400	.2R	110	. 1L	270	1594	240
23	.1R	938	400	.2R	110	.OR	270	874	410 .
24	.OR	1197	400	.2L	110	.2L	280	3859	170
25	.1L	938	400	.2L	110	.2L	280	5145	260
26	. lL	938	400	.2L	110	.2L	280	5145	290
27	. 1R	938	390	.2R	110	. 1R	280	2572	330
28	.OR	676	400	.2R	100	.1L.	270	2264	240
29	.OR	676	400	. 1R	110	.1L	270	1594	270
30	.1L	676	400	.1L	110	.2L	280	1182	270

END OF PHASE II LISTING

10. TABULATION OF FLIGHT DATA-PHASE III

FLT	PURPOSE	- REFERENCE	PHASE III	ALT FLN	500	FLT	DI	RECTION - TO	DESTRAB	LE - VOR	
	R	CVR 1		RCVR	2		RC	√R 3	R	CVR 4	
DIST	CP	π v	FLAG	CP	FLAG	СР	ä	FLAG	UV	FLAG	
1	.OR	5110	340	.8L	180	.1	L	340			
2	1.1L	3406	350	.2L	190	.8		340			
3	1.2L	1442	350	.2R	190	1.0		340			
4	1.5L	1442	350	.3R	190	1.3		340			
5	1.0L	938	350	.3R	180	1.2	R	340			
6	1.4L	432	360	.5R	180	1.3	R	340			
7	1.2L	170	350	.4R	180	1.1	R	330			
8	1.1L	154	350	.3R	180	1.1	R	330			
9	1,1L	120	350	.5R	180	1.0	R	320			
10	.5L	103	340	, OR	170	.5	R	310			
11	.87.	86	340	. 1R	170	.8	R	320		-	
12	1.0L	79	340	.2R	170	.8	R	320			
13	.9L	67	340	.1R	170	.7	R	310			
14	.9L	62	340	.2R	170	.8	R	320			
15	.7L	55	340	, 1R	170	. 8	R	310			
16	.6L	43	340	.1R	170	.6	R	310			
17	.7L	31	330	.2R	170	.7		300			
18	.7L	31	330	.2R	160	.6	R	310			
19	.8L	24	340	.2R	160	.7	R	300			
20	.7L	22	330	, 1R	160	7		290			
21	.7L	22	340	.1R	160	.7		300			
22	.7L	19	330	.1R	160	. 6	R	280			
23	.5L	17	330	.OR	150	.4	R	280			
24	.4L	14	330	.OR	150	.3	R	280			
25	,4L	14	330	, OR	150	.4		270			
26	.4L		330	.1L	150	.3		280			
27	.5L	14	320	.OR	150	.5		270			
28	.3L	10	320	.2L	140	.2		260			
29	.4L	10	330	.1L	140	.5		260			
3.0	.3L	10	330	, OR	140	.3	R	250	· · · · · · · · · · · · · · · · · · ·		

FLT	PURPOSE	- TEST	PRASE TII	ALT FL	N 500	FLT DIR	ECTION - TO	DESTRAB	LE - VOR	
	R	CVR 1		RCV!	R 2	RCV	rR 3	R	CVR 4	
DIST	CP	υv	FLAG	CP	FLAG	CP	PLAG	υv	FLAG	
1	.OR	5110	330	.6L	180	.2L	330	50	10	
2	1.3L	3406	350	.1R	190	.9R	350	50	20	
3	1.1L	1703	340	.2R	180	.8R	330	50	20	
4	.1L	1442	330	.OR	180	.2R	320	50	30	•
5_	.9L	1197	330	.5R	180	,9R	310	50	40	
6	.4L	432	330	.OR	170	.5R	310	50	40	
7	.4L	170	330	.OR	170	.4R	310	50	70	
8	.5L	154	330	.2R	186	.7R	320	50	100	
9	1.1L	137	340	.8R	180	1.0R	310	50	170	*
10	.9L	120_	340	.5R_	170	,9R	32 0	50	230	
11	.8L	86	330	.5R	170	.8R	310	50	220	
12	.7L	79	320	.2R	170	.8R	310	50	290	
13	.8L	74	330	.3R	170	.7R	310	50	310	•
14	1.0L	62	340	.5R	170	1.0R	300	50	350	
15	1.2L	55	330	.5R	170 "	1.0R	300	104	370	
16	1.4L	38	330	.6R	170	1.1R	300	154	380	
17	1.3L	31	330	.5R	170	1.OR	290	204	390	
18	1.4L	26	330	.5R	160	1.3R	280	412	400	
19	1.5L	26	330	.7R	160 .	1.2R	260	566	400	
20	1.3L	22	330	.5R	160	1,1R	180	1028	400	
21	1.4L	22	330	.4R	150	1.4R	110	2572	390	
22	.9L	17	300	.4R	130	.5R	30	5145	400	
23	.3L	22	230	.4L	10	.2R	20	39873	390	
24	.2L	24	110	.6L	0	.2R	20	51450	400	
25	1.4L	14	290	, OR	110	.3R	20	5140	400	
26	1.3L	14	310	.2R	140	1.8R	110	3959	400	
27	1.7L	14	320	.4R	140	2.1R	130	3243	400	
28	1.6L	12	320	.4R	140	1.3R	100	2264	390	
29	1.9L	10	320	.7R	. 130	.6R	90	1286	400	
30	1.3L	10	320	.3R	130	.6R	110	1028	410	
100		11			41-41			1 1 2 2 2		

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FLT	PURPOSE	- REFERENCE	PHASE III	ALT FL	N 1000	FLT DIR	ECTION - TO	DESTRAB	LE - VOR	
	RO	CVR 1	•	RCV	R 2	RCV	TR 3	R	CVR 4	
DIST	CP	υv	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1	.5R	5110 1	340	.4L	190	.7L	350			
2	1.1R	5110	330	.7L	190	1.1L	330			
3	1.1R	5110	330	.7L	190	.9L	330			
4	1.2R	3406	330	.7L	196	.8L	330			
5	1,1R	1703	330	.7L	190	.8L	330			
6	1.3R	1442	340	.6L	190	1.0L	330			
7	1.0R	1197	350	.4L	190	.6L	340			
8	.3R	938	350	.OR	190	.3L	340			
9	.8R	676	340	.4L	190	.6L	330			
10	.9R_	432	340	.5L	190	.7L	330			
11	.9R	432	340	.6L	190	.7L	330			
12	1.1R	170	340	.8L	180	.9L	330			
13	1.1R	154	340	1.0L	180	.8L	330			
14	.8R	137	330	.7L	180	.7L	320			
15	1.OR	103	340	.6L	180	.7L	330			
16	.8R	103	350	.5L	190	.5L	330			
17	1.1R	86	340	.5L	180	.6L	320			
18	1.OR	79	340	.4L	180	.6L	330			
19	1.1R	74	350	.6L	180	.6L	330			
20	.7R	74	340	,4L	. 180	.5L	320			
21	1.1R	62	340	.6L	180	.7L	320			
22	1.0R	62	330	.7L	180	.7L	320			
23	1.4R	50	330	.9L	170	.9L	310			
24	1.4R	43	330	.7L	170	.8L	310	•		
25	1.2R	38	340	.6L	170	. ,8L	310			
26	1.5R		330	1.0L	176	1.1L	310			
27	1.4R		330	.9L	170	.8L	310			
28	1.6R	26 .	330	1.0L	160	.9L	310			
29	1.4R	22	330	1.0L	160	.8L	310			
30	1.1R	19	330	.8L	160	,4L	300			

FLT	PURPOSE	- TEST	PHASE III	ALT FL	N 1000	FLT DI	RECTION - TO	DESTRAB	LE - VOR	
	R	CVR 1	,	RCV	R 2	RC	/R 3	R	CVR 4	
	-									
DIST	CP	UV (FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1	.2R	5110	340	.2L	190	.4L	350	50	80	
2	.3R	5110	330	.1L	200	.5L	340	50	100	
3	.4R	5110	330	.OR	190	.4L	330	50	140	
4	1.2R	3406	330	.6L	190	.8L	340	50	170	
5	. 7R	1703	340	,4L	190	.5L	330	50	210	
6	.4R	1442	340	.OR	190	.3L	340	50	250	
7	.2R	1197	350	. 1R	190	.OR	340	50	260	
8	.3R	938	340	.OR	190	.OR	330	50	290	
9	.2R	676	340	.OR	190	. 1L	330	50	330	
10	.3R	432	330	.OR	190	,3L	330	104	350	
11	.6R	170	340	.2L	190	.3L	330	104	370	
12	.5R	154	330	.3L	190	.3L	330	154	380	
13	.1R	137	340	.1R	190	.OR	330	204	390	
14	.OR	120	340	. 1R	180	.1R	330	258	400	
15	, OR	120	340	, 2R	180	,1R	330	362	400	
16	. 1R	103	330	. OR	180	.OR	320	462	400	
17	.OR	86	330	.2R	180	.2R	320	720	400	
18	.OR	79	340	. 1R	180	.OR	320	924	400	
19	.OR	79	330	.OR	180	.OR	310	1957	390	
20	.1L	74	330	, 2R	180	, 6R	260	3243	390	
21	.OR	67	330	.OR	180	1.5R	180	5145	390	
22	.OR	62	330	.OR	160	1.9R	120	39873	390	
23	.OR	55	330	.2L	160	1.6R	140	28297	390	
24	.OR	43	290	.9L	110	. 1R	10	51449	380	
25	, OR	38	320	,2L	150	1.2R	90	39873	380	
26	.OR	31	330	.2L	160	1.9R	140	16721	390	
27	.OR	31	330	.lL	170	1.5R	140	3859.	390	
28	.OR	26	330	.OR	170	1.4R	170	2572	390	
29	.3L	22	330	.OR	160	1.4R	170	2264	400	
30	.8L	22	340	.3R	170	1.9R	180	1957	390	

FLT	PURPOSE	- REFERENCE	PHASE III	ALT FL	N 2000	FLT DIR	ECTION - TO	DESTRAB	LE - VOR	
	R	CVR 1		RCV	R 2	RCV	TR 3	R	CVR 4	
DIST	CP	บง	FLAG	CP	FLAG	CP	FLAG	υv	FLAG	
1	2.6L	5110	340	2.1R	190	1.7R	340			
2	.3L	5110	340	.2R	200	. 1R	350			
3	.4L	5110	330	.5R	190	.4R	340			
4	.8L	5110	350	.8R	200	.7R	350			
5	.6L	3406	340	. 8R	190	.9R	350			
6	.6L	3406	350	. 7R	190	.6R	350			
7	.7L	1703	350	.8R	. 190	.8R	350			
8	.6L	1442	350	.7R	190	.6R	340			
9	.6L	1197	340	.7R	190	.6R	340			
10	2R	1197	350	OR	190	. 1R	30û			
11	.6L	938	350	.7R	190	.5R	340			
12	.2L	938	340	.2R	190	.1R	330			
13	.4L	676	350	.4R	190	.4R	340			
14	.5L	432	340	.5R	190	.5R	330			
15_	.3L	170	350	4R	190	.5R	340			
16	.4L	154	340	.6R	190	.7R	330			
17	.2L	154	350	.4R	190	.4R	330			
18	.3L	137	330	.5R	180	.5R	330			
19	.3L	120	340	.5R	190	.4R	330			
20	.61	120	340	.5R	180	.4R	330			
21	.6L	103	330	.6R	180	.5R	320			
22	.5L	86	340	.6R	180	.5R	320			
23	.4L	79	340	.5R	180	.4R	320			
24	.5L	74	330	.5R	180	.5R	310			
25_	.2L	67	330	. 5R	190	.4R	320			
26	.8L	67	340	.9R	180	.9R	320	-		
27	.6L	62	340	.6R	180	.5R	320			
28	.5L	62	340	.4R	180	.5R	310			
29	.5L	62	330	.5R	180	.6R	310			
30	3L	55	350	, 6R	180	.5R	310			

	FLT	PURPOSE	- TEST	PHASE III	ALT FI	N 2000	FLT DIR	ECTION - TO	DESIRABI	LE - VOR	
		RO	CVR 1	•	RCV	'R 2	RCV	R 3	Re	CVR 4	
		**	•								
	DIST	CP	uv	FLAG	CP	FLAG	CP	FLAG	ָע ע	FLAG	
	1	2.8L	5110	330	2.2R	190	2.2R	340	50	220	
	2	.9L	5110	340	.8R	190	.7R	340	50	260	
	3	.6L	5110	340	.6R	200	.6R	330	50	310	
	4	1.0L	3406	340	.9R	190	1.0R	340	50	320	
	5	1.4L	3406	350	1.4R	190	1.2R	340	50	340	
	6	1.4L	1703	350	1.2R	190	1.3R	350	104	350	
	7	1.2L	1703	350	1.2R	200	1.3R	350	104	360	
	8	1.3L	1442	350	1.2R	190	1.4R	340	154	380	•
	9	1.4L	1442	360	1.2R	190	1.4R	340	154	380	
	10_	1.6L	1197	360	1.3R	190	1.4R	340	204	380	
	11	1.4L	938	360	1.5R	190	1.6R	340	258	390	
	12	1.6L	938	350	1.3R	190	1.5R	340	308	390	
	13	1.5L	676	350	1.2R	190	1.4R	340	362	400	
-	14	1.5L	432	350	1.3R	190	1.5R	340	462	400	
	15_	1.4L	170	350	1.4R	190	1.6R	340	670	400	
	16	1.7L	170	360	1.5R	190	1.7R	340	770	390	
	17	1.8L	154	350	1.5R	190	1.7R	330	1182	400	
	18	1.4L	137	350	1.2R	190	1.3R	320	1957	400	
	19	1.2L	137	350	1.1R	180	1.1R	320	2572	390	
	20	1.3L	103	340	1.1R	190	1.4R	270	4529	390	
	21	1.3L	103	330	1.2R	180	1.7R	190	5145	390	
	22	1.1L	86	330	1.OR	180	2.OR	160	16721	390	
	23	1.0L	86	330	.8R	180	1.3R	190	16721	440	
	24	.8L	74	330	.4R	170	1.0R	80	39873	400	
	25	1.0L	67	330	.7R	170	1.4R	100	39873	400	
	26	.9L	67	330	. 5R	180	2.2R	170	28297	400	
	27	.9L	67	330	.8R	180	1.7R	150	514 5	400	
	28	1.0L	62	340	.3R	180	1.5R	190	4529	410	
	29	1.2L	62	340	.8R	180	1.6R	210	3243	400	
	30_	1.11	55	320	.9R	180	1.4R	250	1957	410	

FLT	PURPOSE	- REFERENCE	PHASE III	ALT FLY	3000	PLT	DIRECTION - TO	DESTRABI	LE - VOR	
	R	CVR 1		RCVE	2		RCVR 3	RC	CVR 4	
DIST	CP	טע יִ	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	
1	2.7L	5110	320	1.7R	190	.51	310			
2	2.5L	5110	310	1.7R	190	.51	R 310			
3	1.6L	5110	320	.9R	190	.31	310			
4	1.5L	5110	320	.9R	190	.21	. 330			
5	1.7L	3406	320	1.1R	190	.01	330			
6	1.8L	5110	320	1.3R	190	.01	320			
7	1.5L	3406	320	.9R	190	.01	320			
8	2.1L	1703	330	1.3R	190	.21	₹ 330			
9	2.3L	1703	320	1.6R	200	. 71	330			
10	1.8L	1442	320	1.2R	190	, 11	330			
11	1.3L	1442	320	.7R	190	.21	320			
12	.9L	1442	310	.4R	190	. 41				
13	.8L	1197	310	.2R	190	. 61	300			
14	.8L	1197	310	.1R	190	. 51	310			
15_	.71	938	310	.2R	190	. 41	310			
16	.9L	938	300	.3R	180	.31	310			
17	1.1L	938	300	.3R	190	. 11	. 310			
18	1.1L	676	300	.5R	190	.01	320			
19	1.2L	676	300	.4R	180	.21	320			
20	2.0L	432	290	1,2R	190	.81	320			
21	2.4L	170	300	1.6R	190	1.31	330			
22	2.5L	154	300	1.5R	180	1.31	330			
23	2.2L	154	280	1.3R	180	1.13	330			
24	1.7L	137	280	.8R	170	. 71	310			
25	1.6L	120	270	,6R	170	, 5 F	310			
26	1.6L	120	270	.8R	170	. 6F	310			
27	1.7L	103	270	.7R	170	. 6F	310			
28	1.7L	103	270	: .9R	170	. 81	310			
29	1.6L	179	280	.8R	170	. 81	310			
30	2.1L	. 74	* 260	1.3R	160	1,11	310			

FLT	PURPOSE	- TEST	PHASE III	ALT FL	3000	FLT DIR	ECTION - TO	DESIRABI	LE - VOR	
	R	CVR 1		RCVE	2	RCV	R 3	RO	CVR 4	
		41								
DIST	CP	UV f.	FLAG	CP	FLAG	CP	FLAG	עָע	FLAG	
1	.9L	5110	330	.2R	190	.2L	310	104	360	
·2	1.5L	5110	320	1.0R	190	.1L	310	104	360	
3	.2L	5110	320	.1L	190	1.1L	310	104	360	
4	.5L	5110	330	. 1R	200	.7L	320	154	390	
5	.4L	5110	320	.2L	190	1.0L	310	154	390	
6	1.3L	5110	310	.4R	190	.6L	300	204	380	
7	2.1L	3406	340	1.1R	190	.OR	310	204	400	
8	2.5L	1703	340	1.5R	190	.2R	310	204	400	•
9	2.7L	1703	350	1.5R	190	.2R	310	258	410	
10	2.5L	1442	340	1,3R	190	,2R	310	308	400	
11	2.5L	1703	320	1.7R	200	1.1R	320	362	400	
12	3.0L	1442	350	1.7R	190	.5R	310	412	410	
13	2.8L	1442	350	1.7R	190	.6R	310	462	400	
14	2.9L	1197	350	1.7R	190	.5R	310	720	400	
15	2.8L	938	350	1.4R	190	.SR	310	874	400	
16	3.OL	938	340	1.7R	190	.6R	310	1028	360	
17	2.7L	676	350	1.5R	190	.5R	310	1286	400	
18	2.5L	676	340	1.5R	190	1.0R	310	1957	410	
19	2.2L	676	310	1.3R	190	.7R	310	3243	410	
20	2.5L	432	330	1.3R	180	.3R	300	3859	410	
21	2.4L	170	340	1.2R	180	.9R	270	4529	410	
22	2.1L	154	330	.9R	180	1.OR	220	5145	420	
23	2.2L	170	330	1.OR	180	.5R	270	4529	430	
24	1.9L	137	310	.8R	180	2.5R	180	39873	430	
25	1.9L	137	330	.6R	170	2.0R	180	39873	420	
26	2.1L	137	330	.8R	180	1.6R	140	5145	420	
27	2.4L	103	340	1.1R	80	1.4R	160	5145	400	
28	2.7L	103	340	1.1R	180	1.1R	190	4529	410	
29	2.5L	-86	340	1.1R	170	.5R	220	3859	410	
30	2.6L	74	530	1.1R	170	.5R	240	2572	400	

FLT	PURPOSE	- REFERENCE	E PHASE III	ALT FI	N 4000	PLT DI	ECTION - TO	DESTRAB	LE - VOR	
	R	CVR 1		RC	/R 2	RCV	7R 3	R	CVR 4	
DIST	CP	UV .	FLAG	CP	PLAG	CP.	FLAG	uv	FLAG	
1	1.6L	1703	320	1.0R	210	7 'R	340			
2	2.6L	1703	350	2.1R	210	2.4R	370			
3	.5R	1703	330	.4L	190	.OR	340			
4	.1L	5110	330	.OR	200	.4R	340			
5_	5L	3406	330	.3R	200	.5R	350			
6	.4R	1703	330	.5L	190	.OR	340			
7	.2R	3406	330	. 1R	200	.4R	350			
8	.3L	3406	340	.5R	200	.7R	350			
9	.2R	1703	330	.OR	200	.1R	340			
10_	6R	1703	330	.4L	190	.1L	340			
11	.OR	1442	330	.2R	190	.5R	350			
12	.OR	1703	330	. 1R	200	.4R	340			
13	.4R	1197	33 0	.2L	200	.2R	340			
14	.3R	1197	340	.OR	200	.1R	340			
15_	3R	938	330	OR	200	.3R	340			
16	. 1R	1197	340	.2R	200	. 5R	340			
17	.OR	938	340	.3R	200	. 5R	340			
18	.5R	1197	330	.lL	200	.3R	340			
19	.8R	676	330	.5L	200	.2L	340			
20	.1R	9 76	330	2R	200	.6R	330			
21	.3L	432	340	, 5R	190	.9R	340			
22	.3R	432	340 ~	. 1R	200	.3R	340			
23	1.8R	432	330	1.0L	190	.8L	240			
24	.2R	154	340	. OR	200	.3R	340			
25_	5L	154	340	.8R	200	1,0R	350			
26	.4R	154	330	.OR	200	.3R	330			
27	2.2R	137	330	1.6L	200	1.0L	330			
28	1.7R	120	340	1.3L	200	.9L	340			
29	1.4R	137	340	1.0L	200	.5L	350			
30_	.7R	120	350	<u>4L</u>	200	OR	350 ·			

FLT	PURPOSE	- TEST	PHASE III	ALT FL	N 4000	FLT DI	RECTION - TO	DESTRAB	LE - VOR	
	R	CVR 1	•	RCV	R 2	RCV	7R 3	R	CVR 4	
		1.1								
DIST	CP	цy	FLAG	CP	FLAG	CP	FLAG	บง	FLAG	
1	2.8L	5110	330	1.7R	190	2.2R	330	154	38C	
2	2.7L	1703	370	2.3R	200	2.3R	370	154	400	
3	.1L	5110	330	.1R	200	. 1R	340	204	380	
4	.5L	1703	330	. 2R	200	. 5R	350	204	390	_
5	.3L	3406	330	. 1R	190	3R	340	204	410	
6	.1R	3406	330	.4L	190	.3L	360	204	400	
7	,2R	3406	330	.3L	200	.2L	350	258	410	
8	, 1R	1703	330	.2L	200	.OR	350	308	400	•
9	.3R	1703	330	.1L	200	.1R	350	412	410	
10	.3R	1703	330	OR	200	. 1R	350	412	410	
11	, OR	1703	340	.OR	200	.2R	360	462	420	
12	.OR	1703	340	.OR	200	.1R	340	566	430	
13	.2R	1442	340	.OR	200	.3R	350	670	410	
14	.3L	1197	340	.5R	200	.5R	340	874	420	
15_	41.	1197	340	. 7R	200	.7R	360	1182	430	
16	.1L	938	350	.3R	200	.5R	350	1594	430	
17	.3L	1197	340	.3R	200	.5R	340	1957	430	
18	.OR	1197	330	.2R	200	.3R	340	2572	430	
- 19	.3R	938	340	.OR	200	.3R	340	3243	460	
20	.1R	938	350	OR	200	.3R	350	4529	530	
21	.OR	938	340	.2R	200	. 5R	330	4529	660	
22	.OR	432	340	.5R	200	.9R	330	4529	700	
23	.OR	432	340	.2R	200	.5R	340	2264	690	
24	.OR	432	340	.3R	200	1.6R	270	16721	670	
25	3R	170	330	.2L	200	1.1R	260	16721	620	
26	.7R	43 .	330	.5L	200	1.1R	250	16721	590	
27	.OR	154	330	.2R	190	1.4R	280	5145	590	
28	.7L	154	340	.8R	200	1.4R	310	3859	580	
29	.1L	137	340	.2R	200	1.IR	300	4529	480	
30	1.0R	137	330	7L	200	OR	300	3243	410	

FLT	PURPOSE	- REFERENCE		ALT FLN	5000	FLT	DIRECTION - TO	DESTRABL	E - VOR
	R	CVR 1	•	RCVR	2		RCVR 3	RC	VR 4
DIST	CP	uv	FLAG	CP	FLAG	CP	FLAG	uv	FLAG
1	2.4L	5110	330	1.6R	200	2.1F	310		
2	2.7L	3406	350	1.9R	200	2.4F	320		
3	2.5L	3406	320.	1.7R	200	2.21	300		
4	1.2L	3406	330	.6R	210	1.1F	310		
5_	41.	5110	360	OR	200	, 1F	300		
6	.3R	3406	340	.2L	220	. 2F	320		-
7	1.0R	1703	360	1.1L	200	.91	300		
8	1.1R	1703	330	1.0L	210	.41	. 310		
9	.8R	1703	350	.8L	200	.61	. 290		
10_	.3R	1703	350	.4L	200	, OF	310		
11	.1R	3406	340	.3L	210	.OR	300		
12	.3L	1703	360	/ .1L	210	.OF			
13	.4R	1703•	350	.5L	210	.OF	290		
14	.OR	1703	370	,3L	200	.21	. 290		
15	, 2R	1703	360	.OR	200	.38			
16	.2L	1442	360	.2R	210	. 5R	300		
17	.7L	1197	370	.6R	210	1.OF			
18	.2L	1197	360	.OR	220	.3R			
19	.7L	1197	360	. 1R	200	.2R			
20	1.4L	938	370	.9R	210	1.49			
21	1.2L	938	370	. 5R	200	. 5R			
22	.7L	676	360	.3R	220	1.OR			
23	.5L	938	350	.OR	210	. 6R			
24	.5L	676	390	.1L	200	.OR			
25	, OR	432	370	.2L	200	.38			
26	1.1L	432	380	.3R	200	.3R			
27	1.0L	170	390	.5R	200	1.OR			
28	.8L	432	370	.2R	200	.2R			
29	.8L	154	360	.3R	200	1.OR			
. 30	. 1R	130	350	.4L	190	.2R	280		

FLT	PURPOSE	- TEST	PHASE III	ALT FL	N 5000	FLT DIR	ECTION - TO	DESTRABI	E - VOR	
	RC	VR 1		RC V	R 2	RCV	TR 3	RO	CVR 4	
DIST	CP	ψv	FLAG	CP	FLAG	CP	FLAG	UV	FLAG	
1	. 1R	5110	370	.5L	200	.5L	290	204	390	
2	1.3L	5110	380	.8R	210	1.1R	330	204	400	
3	.8L	3406	360	.2R	200	.2R	290	204	390	
4	.2L	5110	370	.1L	210	•OR	310	258	410	•
5	.9L	3406	360	.4R	210	, 6R	310	258	400	
6	.2L	3406	370	,5L	200	.2L	300	362	400	
7	.3R	5110	340	.5L	210	.OR	310	412	390	
8	.3R	3406	360	.3L	200	"OR	310	412	400	٠,
9	.3R	3406	360	.5L	210	.1L	320	462	410	
10	.7R	1703	340	.8L	190	.2L	300	516	400	
11	.4R	3406	380	.9L	200	.6L	300	676	400	
12	.1R	5110	330	.2L	210	.2R	310	770	400	_
13	.OR	1703	350	.2L	200	.OR	310	1028	400	•
14	.1R	3406	360	.3L	210	.OR	310	1286	400	
15	.3R	1703	350	.4L	200	, OR	320	1594	400	
16	.5R	1442	360	.7L	200	.3L	300	1957	410	
17	.7R	1197	950	.8L	210	.1R	300	2572	400	
18	.5R	1197	360	.7L	200	.2L	290	3243	410	
19	.2L	1197	3 50	.OR	200	.6R	300	4529	420	
20	1.4L	1197	350	.9R	210	1.4R	300	3859	410	
21	2.0L	938	380	1.1R	200	1.3R	310	3859	360	
22	1.5L	938	3 40	.8R	210	1.2R	250	18721	390	
23	2.1L	676	380	.8R	200	1.1R	300	3859	400	
24	1.0L	676	340	.5R	200	2.OR	180	39873	400	
25	1.11	676	370	.5R	200	1,5R	220	28297	400	
26	1.3L	432	350	.6R	200	1.8R	200	16721	390	
27	1.6L	432	360	.8R	210	1.8R	210	16721	390	
28	2.3L	432	380	1.1R	200	1.4R	230	16721	400	
29	2.0L	170	360	1.2R	200	1.7R	250	5145	390	
30	1.01	154	380	4R	190	.7R	260	4529	380	

FLT	PURPOSE	- REFERENCE	PHASE III	ALT FL	N 10000	FLT DIE	RECTION - TO	DESIRABI	E - VOR
	Ŗ	CVR 1	W	RCV	R 2	RCV	7R 3	RO	CVR 4
		- Fa .							
DIST	CP	UV	FLAG	CP	FLAG	CP	FLAG	.	FLAG
1	.3R	5110	350	.8L	180	1.0L	260	`	
2	2.9L	3406	340	2.1R	200	2.1R	290		
3	.9L	3406	360	.3R	200	.OR	280		
4	1.6L	3406	360	.8R	190	.8R	310	•	
5	1.4L	1703	360	.9R	210	1,1R	310		
6	,3R	1703	350	.7L	190	.7L	270		
7	1.5R	3406	330	1.4L	190	1.2L	290		
8	,3R	1703	350	.8L	190	1.0L	290		
9	1.0R	1703	350	1.0L	200	.9L	300		
10	1.1R	1703	350	1.0L	180	1.0L	290		
. 11	.3R	1703	370	.8L	190	1.0L	300		
12	.7R	1703	350	.8L	200	.7L	300		
13	.9R	1703	360	1.3L	190	1.4L	280		
14	1.2R	1703	350	1.2L	200	.8L	300		
15	1.3R	1442	340	1.4L	190	1.2L	290		1
16	1.4R	1442	350	1.3L	180	1.5L	290		
17	1.2R	1442	330	1.3L	190	1.1L	300		
18	1,2R	1442	360	1.4L	180	1.5L	270		
19	1.1R	1442	340	1.1L	190	1.0L	290		
20	. 7R	1197	330	.7L	190	.5L	290		
21	.5R	1197	360	.7L	190	.6L	290		
22	.6R	1442	340	.8L	200	.5L	300		
23	.4R	1197	360	.8L	180	.9L	280		
24	.OR	1197	350	.2L	190	.1L	290		
25	.2L	1197	360	OR	200	, 1R	310		
26	.6L	938	370	, 1R	180	.OR	290		
27	.5L	1197	360	.2R	190	.3R	300		
28	.2L	676	360	.OR	190	.OR	310		
29	.OR	938	350	.OR	200	. OR	310		
30	.OR	938	360	.2L	190	. 1R	3(0		

FLI	PURPOSE	- TEST	PHASE III	ALT FLN	10000	FLT DIF	RECTION - TO	DESTRABI	LE - VOR	
	R	CVR 1		RCVF	2	RC	7R 3	R	CVR 4	
DIST	CP	. uv	FLAG	CP	FLAG	CP	FLAG	υV	FLAG	
1	4.2R	5110	340	3,4L	190	3.1L	280	362	400	
2	1.6L	5110	340	.9R	210	1.4R	320	362	410	
3	.RL	1703	330	.2R	200	.4R	290	412	390	
4	1.3L	3406	350	.5R	200	.9R	310	412	410	
5_	2.0L	1442	340	1.3R	200	1.8R	320	516	390	
6	.OR	1442	340	.4L	190	.2L	300	516	400	
7	.1L	1703	330	.1L	210	.3R	300	770	400	
8	.2R	3406	330	.6L	200	.1L	300	7 20	400	
9	.1L	3406	340	.lL	210	.2R	310	874	390	
10_	.2L	3406	350	OR	200	.2R	310	924	400	
11	.4L	3406	350	.1L	200	.OR	320	1028	400	
12	.2L	3406	340	.OR	210	.4R	320	1182	410	
13	.3L	3406	350	.iL	200	.1R	310	1286	420	
14	.2L	3406	350	.OR	200	.2R	310	1594	400	
15	.11.	3406	340	OR	200	.4R	310	1594	400	
16	.3L	3406	360	.2L	190	.3L	300	1594	410	
17	.6R	1442	350	.8L	200	.4L	300	2264	390	
18	.9R	1703	360	1.5L	180	1.47	270	2572	420	
19	1.2R	1442	340	1.4L	190	1.1L	300	1957	410	
20	.5R	1442	340	.7L	200	1 <u>L</u>	300	4529	410	
21	, 1L	1442	360	.2L	190	.1L	300	3243	410	
22	.6L	1197	350	•1R	200	.3R	310	670	450	
23	1.2L	938	370	.3R	190	.1R	280	874	400	
24	1.3L	1197	350	.6R	200	1.0R	310	5145	390	
25	1.1L	938	340	.5R	200	5R	290	16721	400	
26	1,2L	938	370	.3R	190	.5R	300	4529	420	
27	1.1L	938	370	.5R	200	.8R	290	4529	400	
28	1.3L	676	360	.3R	190	.2R	290	5145	390	
29	.6L	938	350	.OR	190	.3R	290	5145	410	
30	-2L	432	360	.3L	190	.2L	260	4529	440	

FLT	PURPOSE	- REFERENCE	PHASE III	alt fli	15000	FLT I	IRECTION - TO	DESTRAB	LE - VOR	
	R	CVR 1	•	RCVI	R 2	F	RCVR 3	R	CVR 4	
DIST	CP	uv	FLAG	CP	FLAG	CP	FLAG	u v	FLAG	
1	3.0L	3406	280	2.2R	180	1.7R	330			
2	2.8L	5110	290	2.2R	190	1.6R	340			
3	3.2L	3406	310	3.0R	200	1.9R	370			
4	1.4L	3406	290	.8R	180	. 5R	330			
5	.8L	1763	300	,4R	190	, 1R	350			
6	1.3L	1703	310	.9R	190	.5R	360		· · · · · · · · · · · · · · · · · · ·	
7	1.9L	1442	320	1.8R	200	1.0R	380			
8	1.7L	1197	320	1.7R	190	.9R	370			
9	.2L	1442	310	.2R	190	.4L	350 -			
10	2.1R	1442	290	1.9L	_190	2.0L	350			
11	1.1R	1442	300	1.2L	190	1.4L	350			
12	.2L	1442	300	.OR	190	.4L	350			
13	.3L	1703	290	.OR	190	.3L	340			
14	.OR	1442	290	.3L	190	.7L	350			
15	.5R	1703	290	.9L	190	1.1L	350			
16	.5R	1703	290	.6L	190	1.0L	360			-
17	.OR	1703	310	.1L	190	.5L	360			
18	.OR	1442	310	.OR	190	.5L	360			
19	.2R	1442	300	.2L	190	.6L	360			
20	.6L	1743	300	.3R	190	, lL	360			
21	.4L	1197	300	. 1R	190	.2L	350			
22	.5R	1442	300	. 51.	190	.9L	350			
23	.6R	1442	300	.7L	190	1.OL	350			
24	.OR	1197	300	.OR	180	.5L	350			
25	.2L	1197	300	.1R	190_	.3L	360			
26	.2L	1197	300	, lL	180	.4L	350			
27	.6R	1197	300	.7L	190	1.2L	350			
28	.2R	938	310	.2L	190	.6L	350			
29	.6L	1197	310	.4R	190	.2L	360			
30	OR	938	300	.6R	190	, 2R	350			

FLT	PURPOSE	- TEST	PHASE III	ALT FI	N 15000	FLT DIR	ECTION - TO	DESTRA	BLE - VOR	
	R	CVR 1	· .	RCV	R 2	RCV	TR 3	RO	CVR 4	
		3								
DIST	CP	UV	FLAG	CP	FLAG	CP	FLAG	uv	FLAG	• •
1	2.1L	5110	290	1.2R	190	.9R	310	412	400	
2	1.7L	5110	300	1,0R	200	.6R	330	462	400	
3	2.8L	5110	320	2.1R	200	1.6R	360	516	410	
4	.2L	3406	290	.5L	200	.5L	320	516	410	
5	.4L	3406	320	.3L	190	.4L	330	720	410	
6	1.6L	1703	320	.8R	200	.8R	340	566	410	
7	2.5L	1442	330	1.8R	200	1.4R	360	720	410	
8	3.2L	1197	320	2.5R	200	2.3F.	350	924	410	
9	2.2L	1442	310	1.4R	190	1.2R	330	874	400	
10	1.11	1703	300	.3R	200	2R	330	1028	400	
11	.9L	1442	310	.1R	200	.OR	320	924	410	
12	.9L	1703	310	.1R	190	.OR	330	924	400	
13	.5L	1703	320	.2L	190	.3L	340	1182	400	
14	.OR	1703	290	.3L	180	.4L	330	1286	400	
15	.3R	1703	290	.4L	180	,6L	330	1286	410	
16	.2R	1703	300	.4L	190	.4L	330	1182	410	
17	.2R	1703	.280	.3L	180	.6L	330	, 1182	420	
18	.2L	1442	28C	.3R	170	.OR	330	2264	420	
19	.3L	1442	290	.3R	170	. 1R	320	3243	390	
20	.4L	1442	270	.5R	170	.OR	320	2572	410	
21	.9L	1442	290	.4R	180	.OR	330	1182	410	
22	.7L	1442	270	.5R	170	.OR	320	1286	420	
23	.4L	1197	270	. 5R	170	.1R	320	516	410	
24	.2L	1197	280	.OR	170	.2L	320	2264	400	
25	.OR	1197	280	.2L	170	.4L	310	3859	470	
26	.3R	1197	290	.6L	180	.8L	320	4529	500	
27	.3R	1197	270	.5L	170	.6L	320	3859	450	
28	.1L	938	280	.OR	190	.3L	320	3243	420	
29	.2L	938	270	.3%	160	.2L	310	2572	410	
30	.1R	1197	270	.5L	160	.5L	310	3243	420	

END OF PHASE III LISTING

11. BEGIN SUPPLEMENTAL DATA

FLT	PURPOSE	- REFERENCE	PHASE III	ALT FL	N 2000	FLT DIR	ECTION - TO	DESTRABL	E - VOR	
	R	CVR 1	•	RCV	R 2	RCV	R 3	RC	VR 4	
DIST	CP	υv	FLAG	CP	FLAG	CP	FLAG	υv	FLAG	
ι	1.5L	5110	350	.7R	190	1.8R	310			
2	.OR	5110	350	.6L	190	.4R	300			
3	.6R	5110	360	1.3L	190	.1L	310	- 3		
4	1.0R	3406	350	1.5L	190	.3L	310			
5	1.2R	1703	360	1.5L	190	,3L	300			
6	.5R	3406	350	.9L	190	.2R	300			
7	.2R	1703	370	.8L	190	.2R	310			
8	.2R	1703	340	.8L	190	.4R	300			
9	, 1R	1442	360	.7L	180	.5R	310			
10	OR	1442	350	.5L	190	.7R	310			
11	.3L	938	360	.4L	190	.7R	310			
12	.6L·	938	350	.3L	200	1.OR	300			
13	.9L	676	350	.OR	200	1.4R	310			
14	.6L	676	350	.OR	190	1.1R	300			
15	.3L	170	350	,4L	190	,9R	290			
16	.8L	170	360	.3L	180	1.OR	300			
17	.4L	154	360	.41	180	.9R	300			
18	.6L	154	360	.4L	190	.9R	280			
19	.71	154	340	.4L	170	1.OR	290			
20	.8L	103	360	,3L	180	1.OR	300			
21	.6L	103	350	.4L	190	1.1R	290			
22	.6L	86	350	.4L	180	1.1R	290			
23	.6L	86	360	.6L	180	1.OR	300			
24	.3L	74	330	.8L	170	.9R	290			
25	.7L	74	340	.7L	170	, 7R	280			
26	.9L	67	350	.7L	170	.8R	270	·		
27	.5L	74	350	.7L	170	.8R	280			
28	.4L	79	350	.8L	170	.8R	280			
29	.2L	86	320	.OR	170	1.5R	290			
30	.3R	67	320	.4R	160	1,8R	270			

FLT	PURPOSE	- TEST	PHASE III	ALT FL	N 2000	FLT DI	RECTION - TO	DESTRAB	LE VOR	
	R	CVR 1		RCV	R 2	RC	VR 3	R	CVR 4	
DIST	СР	ָעע	FLAG	СР	FLAG	CP	FLAG	UV	FLAG	
.1	2.OL	5110	370	.9R	200	2.OR	330	50	190	
2	1,1L	5110	360	. 2R	200	1.0R	320	50	.240	
3	1.3L	5110	360	.3R	200	1.4R	320	50	280	
4	.OR	5110	370	.4L	200	.4R	320	50	290	
5	.2R	3406	350	.7L	200	. 2R	320	50	340	
6	, OR	5110	350	.7L	200	.6R	320	104	360	
7	. 1R	3406	370	.7L	200	.3R	330	104	360	
8	.3R	1703	360	.8L	200	.5R	320	104	370	3
9	.1R	1442	350	.6L	190	.4R	320	154	380	
10	.2L	1442	360	.4L	180	. 8R	320	204	390	
11	.5L	1197	360	.2L	200	.9R	310	204	390	
12	.3L	1197	360	.4L	190	.9R	310	204	400	
13	.5L	938	370	.2L	190	1.0R	310	258	410	
14	.4L	676	360	.21.	190	1.0R	320	362	410	
15	.4L	432	36C	,3L	190	1.0R	320	• 412	400	
16	.3L	170	350	.3L	190	.9R	320	670	400	
17	,3L	170	370	.3L	1.90	1.1R	320	770	400	
18	,2L	154	360	.4L	190	.9R	300	1182	360	
19	.6L	137	350	.4L	190	1.0R	310	2264	390	
20	.2L	120	360	.3L	180	.6R	310	3243	400	
21	.1L	103	360	.5L	190	1.0R	300	4529	410	
22	.3L	86	360	,5L	180	1.3R	280	5145	420	
23	.3L	86	350	.5L	190	1.4R	280	5145	410	
24	,1L	86	350	,5L	180	1.8R	230	39873	400	
25	.OR	79	350	.5L	180	2.4R	230	39873	400	
26	OR	67	350	.5L	180	1.7R	270	16721	390	
27	.OR	74	350	.7L	180	1.1R	280	5145	400	
28	.2L	67	350	.5L	170	.8R	270	3859	400	
29	,5L	67	360	.3L	180	1.OR	280	2572	380	
30	.OR	43	350	1,2L	180	,2R	290	1286	400	

ADJACENT CHANNEL ANALYSIS VOR VS LOCALIZER

FLT	PURPOSE -	REFERENCE	PHASE III	ALT FL	N 2000	FLT DIR	ECTION - TO	DESTRAB	LE - LOC
	RC	VR 1		RCV	R 2	RCV	R 3	R	CVR 4
DIST	CP	υv	FIAG	CP	FLAG	CP	FLAG	uv	FLAG
1	.9R	5110	400	1.1R	200	.5R	230		
2	.2R	. 5110	400	.3R	180	.1R	270		
3	,3R	3406	400	.3R	160	.1R	260		
4	, OR	51 i 0	410	.OR	160	.1L	290		
5	.1R	3406	400	.2R	160	.OR	270		
6	.1R	3406	400	, IR	150	.OR	280		
7	.3R	1442	410	.4R	140	.2R	250		
8	.3R	1442	410	.3R	140	.2R	240		
9	.OR	1197	400	, IR	-140	.OR	270		
10_	. 1R	676	410	.2R	130	.OR	260		
11	.2R	676	400	. lR	120	.1R	250		
12	.1R	432	410	.2R	130	.OR	250		
13	.3R	170	390	.3R	120	.1R	250		
14	.1R	137	410	.1R	120	.OR	250		
15	.1R	154	400	. 1R	120	.OR	240		
16	.1R	120	400	, 1R	120	.OR	240		
17	.1R	103	400	.1R	100	.OR	240		
18	.1R	86	400	. 1R	100	.OR	250		
19	.1R	79	400	. 1R	100	.OR	230		
20	.1R	74	400	. 1R	90	.OR	240		
21	, 1R	55	410	.OR	90	.OR	240		
22	.1R	43	380	. 1R	90	.OR	230		
23	.OR	43	410	.OR	70	.OR	220		
24	, 1R	38	420	. 1R	90	.OR	220		
25	.1L	34	410	.1L	90	,1L	230		
26	OR		420	, OR	90	, OR	230		
27	.1R	26	420	. 1R	80	.OR	210		
28	. 1R	26	430	. 1R	70	.OR	220		
29	.OR	24	410	.OR	70	.OR	220		
30	. 1R	22	430	, OR	70	OR	200		

ADJACENT CHANNEL ANALYSIS VOR VS LOCALIZER

FLT	PURPOSE	- TEST	PHASE III	ALT FL	.2000	FLT DIR	ECTION - TO	DESTRAB	LE - LOC	
	RC	CVR 1	· .	RCVF	2	RCV	T. 3	R	CVR 4	
DIST	CP	UV	FLAG	CP	FLAG	CP	FLAG	ָּ עע	FLAG	
1	.7R	5110	410	1.2R	170	.2R	230	104	200	
2	.1L	5110	390	.1L	180	.1L	320	104	210	
3	.OR	5110	390	.1R	160	.OR	290	104	240	
4	. 1R	5110	400	.1R	150	.OR	270	154	240	
5	.1L	5110	410	. OR	160	.1L	300	154	260	
6	.2R	3406	420	. 2R	160	.1R	270	154	270	
7	.2R	1703	400	.3R	140	.1R	250	204	270	
8	.2R	1442	400	.2R	140	.1R	240	204	280	
9	.3R	938	400	.3R	140	.1R	260	258	290	
10	.1R_	938	410	.2R	130	. CR	260	308	290	
.11	. 1R	432	410	.1R	140	.OR	260	412	290	
12	.1R	.432	410	.2R	120	.1R	250	462	290	
13	.OR	170	400	.lR	130	.OR	250	566	300	
14	.OR	137	410	.OR	110	.OR	220	720	300	
15	, 1R	120	400	.OR	90	.OR	180	874	310	
16	.OR	120	410	.OR	110	.OR	150	1182	300	
17	.2R	86	410	.2R	110	.OR	40	.1957	310	
18	.1R	85	380	. 1R	100	.OR	10	*2264	300	
19	.1R	79	400	.1R	90	.OR	0	3859	300	
_20	.OR	62	400	.1R	80	.OR	0	4529	310	
21	.OR	67	410	.1L	60	.OR	0	16721	300	
22	.OR	55	420	.1L	60	.OR	0	3243	300	
23	.OR	43	350	.1R	20	.OR	0	39873	290	
24	.1L	38	360	.OR	0	.OR	0	39873	320	
25	,1R	38	330	.OR	220_	.OR	0	39873	310	
26	.OR	34	360	.OR	10	.OR	0	28297	320	
27	.lL	26	390	.OR	20	.OR	0	16721	320	
28	.OR	24	400	.OR	30	.OR	0	4529	310	
20	. 1R	22	430	.OR	20	.OR	0	3859	320	
30	, OR	22	410	, OR	50	, OR	.0	3243	310	

, END OF SUPPLEMENTAL DATA

SPECIAL VOR/LOC INTERFERENCE TEST REPORT Cessna 172, N-1307F

Flight was conducted in a Cessna 172 airplane equipped with a General Aviation Nav/Comm radio system. The radio did not provide localizer guidance information, however, the localizer audio ident was available. The facilities were located and maintained as described in Phases II and III.

The first run was made from five miles north of the VOR site inbound on a track over the VOR directly to the LOC at 2000 feet AGL. The aircraft receiver was tuned to the LOC (110.5 MHz). No interference was noted in the vicinity of the VOR. Interference if noted would have been in the form of VOR ident on the LOC audio or LOC audio distortion.

The second run was made (with the aircraft receiver tuned to the VOR) from ten miles north of the LOC transmitter flying south FROM the VOR (110.6 MHz) to directly over the LOC transmitter at 2000 feet AGL. Interference was first received directly over the LOC site and continued for approximately three miles after passing the LOC. The VOR crosspointer was not affected.

The third run was made (with the aircraft receiver tuned to the VOR) from five miles south of the LOC at 1000 feet AGL while flying north TO the VOR (110.6 MHz). The first indication of interference to the VOR signal was a momentary flag when directly over the LOC site and then the LOC audio and code was superimposed on the VOR ident for approximately three miles past the LOC. The VOR crosspointer was not affected.

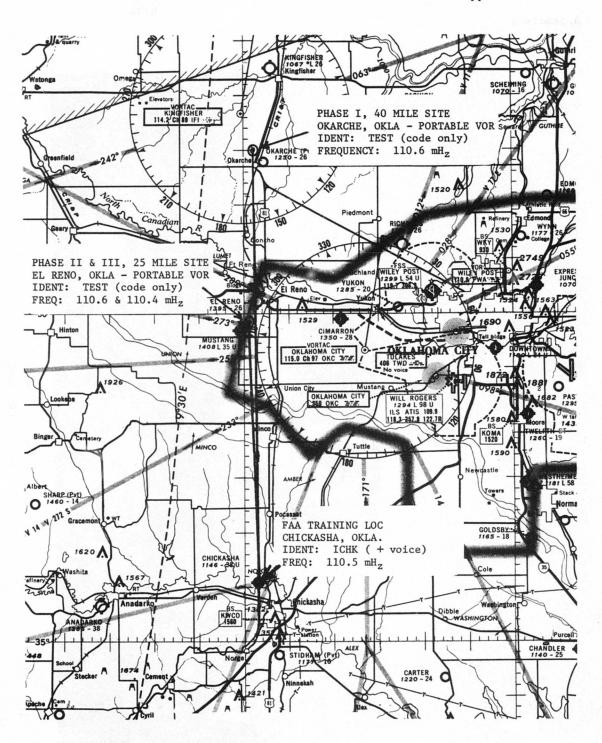
The forth run was from 10 miles south of the VOR flying outbound on the LOC (110.5 MHz) at 1000 feet AGL. The first indication of audio interference on the LOC ident from the VOR occurred three miles south of the VOR and continued to a point approximately four miles north of the VOR.

From the foregoing, it appears that the nav system when tuned to the VOR is susceptible to LOC audio interference only when the aircraft is over the undesired LOC or flying away from it within approximately 3 miles. Interference to the LOC occurs on both sides of the VOR facility within approximately 4 miles.

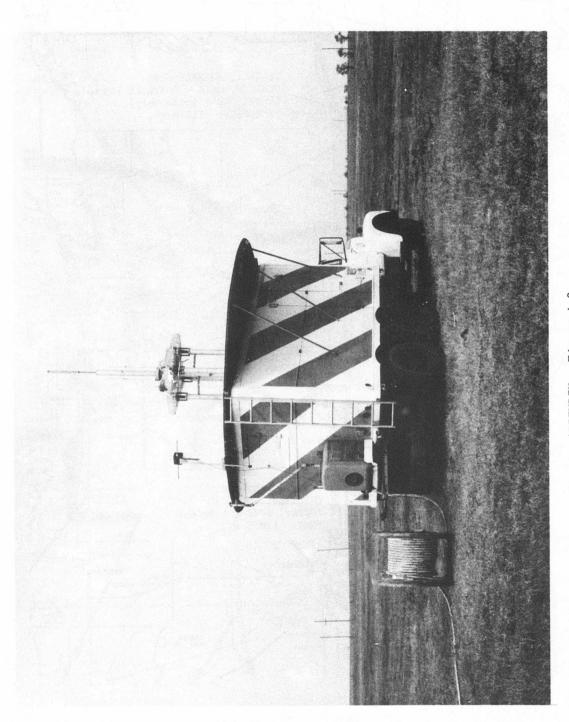
12. ACKNOWLEDGEMENT. The contributions of the following personnel are sincerely appreciated:

Name

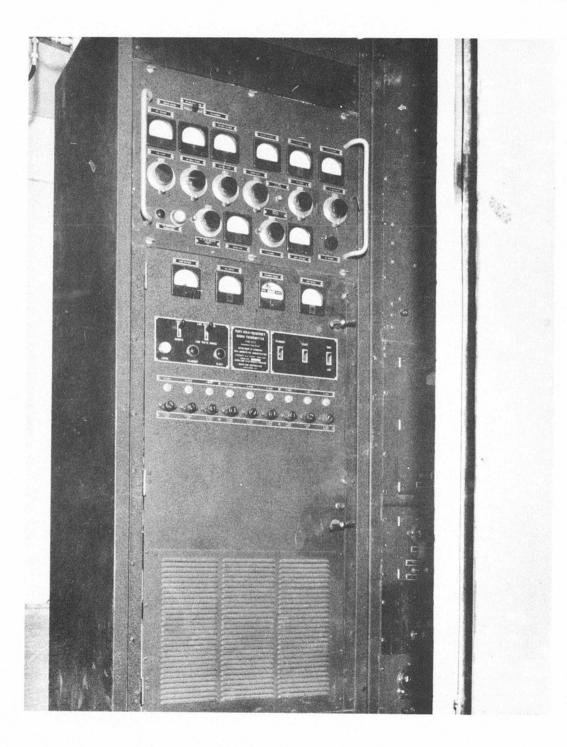
Mr. R. A. Owens	Project Officer	F.S.T.D., AAC-213
Mr. H. A. Hasbrook	Pilot, Beech P-35	CAMI, AAC-115
Mr. J. R. Ball	Electronic Engr. (Flt. Observer)	F.S.T.D., AAC-213
Mr. J. A. Davis	Electronic Engr. (Flt. Observer)	F.S.T.D., AAC-213
Mr. D. M. Warner	Aerospace Engr. (Flt. Observer)	F.S.T.D., AAC-213
Mr. J. H. Roberts	ADP-Project Officer	Data Services Div, AAC-352
Mr. L. T. Epperson	ADP-Programmer	Data Services Div, AAC-352
Mr. H. C. Blalock	Electronic Technician (LOC)	FAA Depot, AAC-442
Mr. A. J. Dolezal	Electronic Technician (VOR)	FAA Depot, AAC-442
Mr. T. S. Mulanax	Electronic Technician (LOC)	FAA Depot, AAC-442
Mr. H. B. Stinson	Electronic Technician (VOR	FAA Depot, AAC-442
Mr. R. Childers	Electronic Technician (Airborne)	ASB, AAC-825
Mr. R. R. Howell	Electronic Tech. (Line Maint.)	ASB, AAC-832
Mr. E. L. Prater	Electronic Tech. (Line Maint.)	ASB, AAC-832
Mr. P. G. Taylor	Electronic Engr. (Avionic)	ASB, AAC-845
Mr. L. Buntz	Project Chief Pilot	FAA Academy, AAC-954
Mr. J. H. Slattery	Academy Project Officer	FAA Academy, AAC-954
Mr. E. W. Hunt	Data Evaluation Specialist	N.F.I.D., AFS-632
Mr. E. L. Kerpo	Data Evaluation Specialist	N.F.I.D., AFS-632
Mr. A. L. Lovelace	Chief, Jet Section	N.F.I.D., AFS-632
Mr. J. D. Morris	NFID Project Officer	N.F.I.D., AFS-630



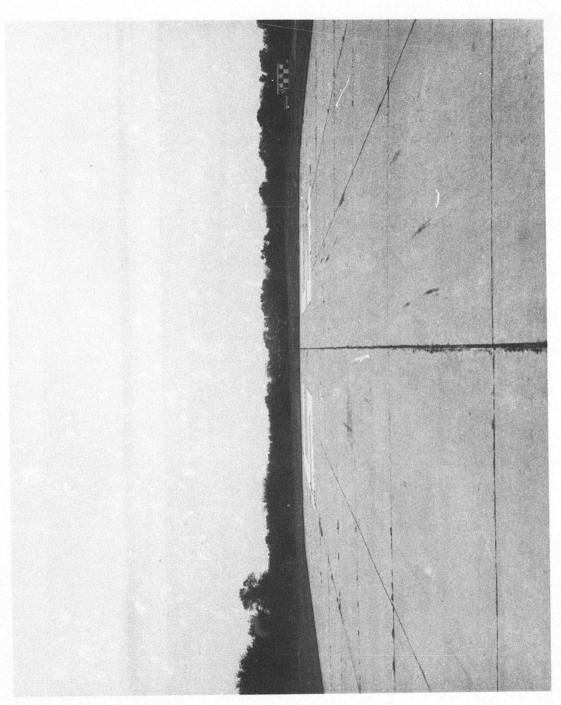
APPENDIX - Figure A-1 Map of Site Locations



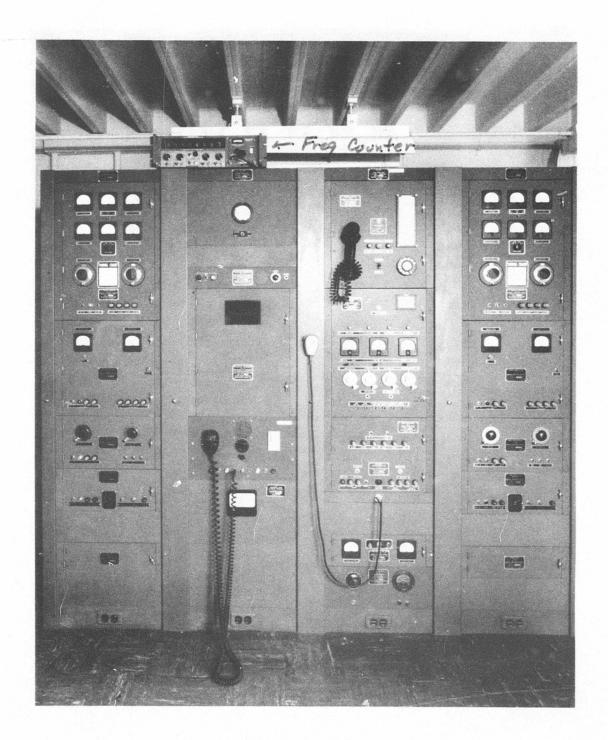
APPENDIX - Figure A-2 Portable VOR Facility



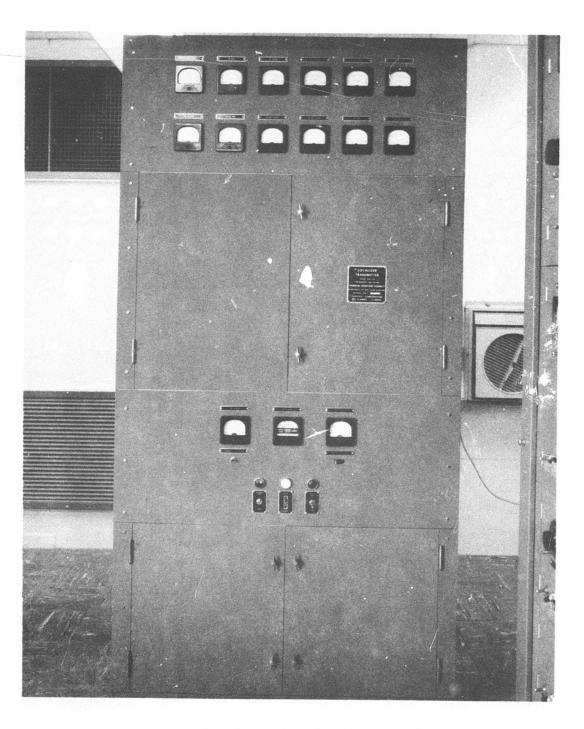
APPENDIX - Figure A-3
Portable VOR Transmitting Equipment



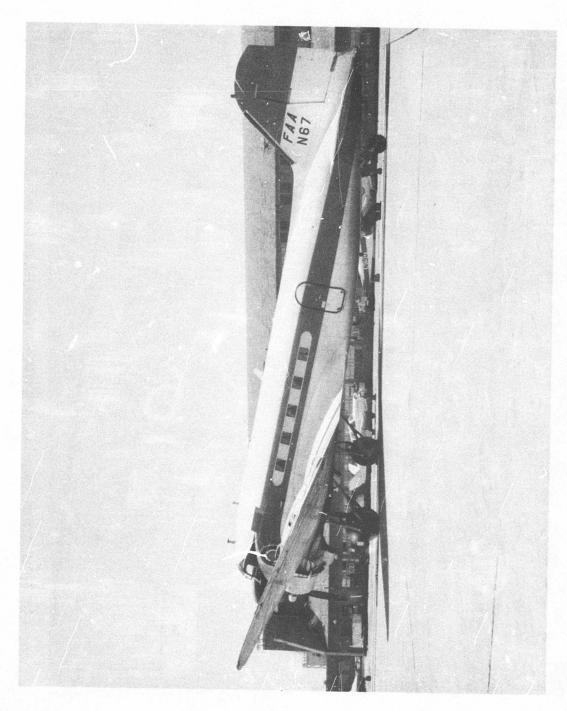
APPENDIX - Figure A-4 Chickasha, Oklahoma ILS Facility



APPENDIX - Figure A-5 Chickasha, Oklahoma ILS Equipment Room



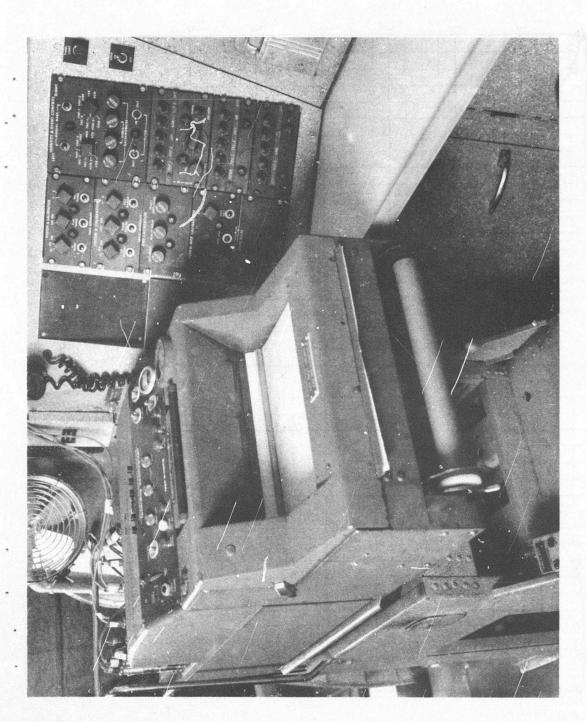
APPENDIX - Figure A-6 Chickasha, Oklahoma ILS Transmitting Equipment



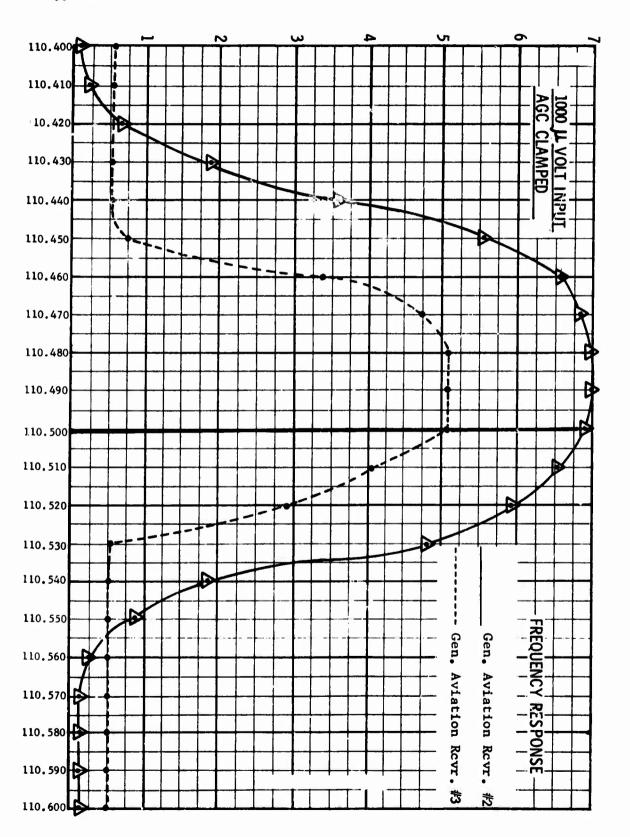
APPENDIX - Figure A-7 FAA Flight Inspection Aircraft N-67

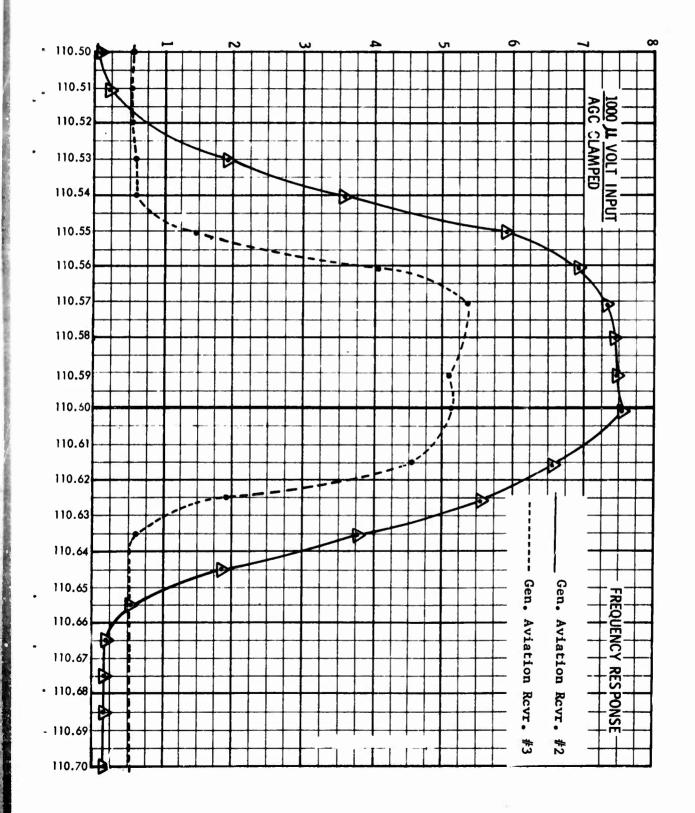


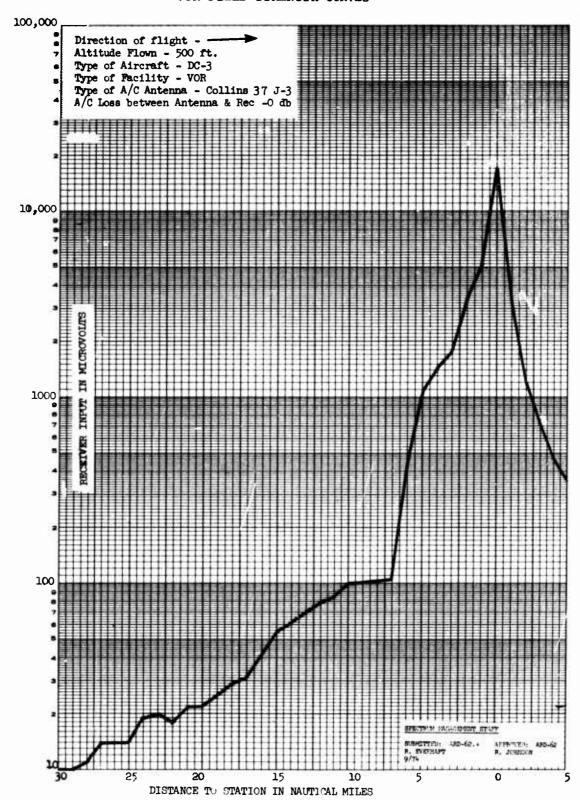
APPENDIX - Figure A-8 Flight Inspection Console Panel



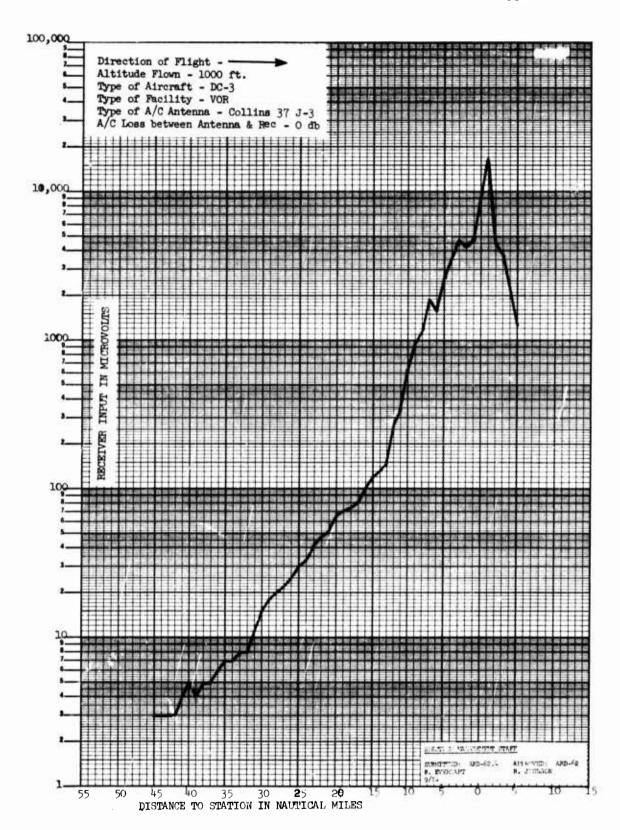




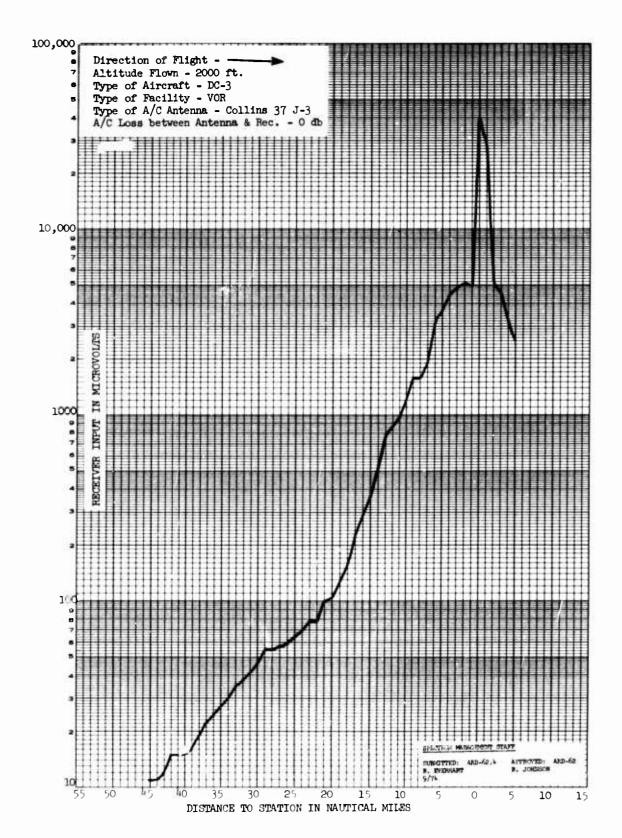




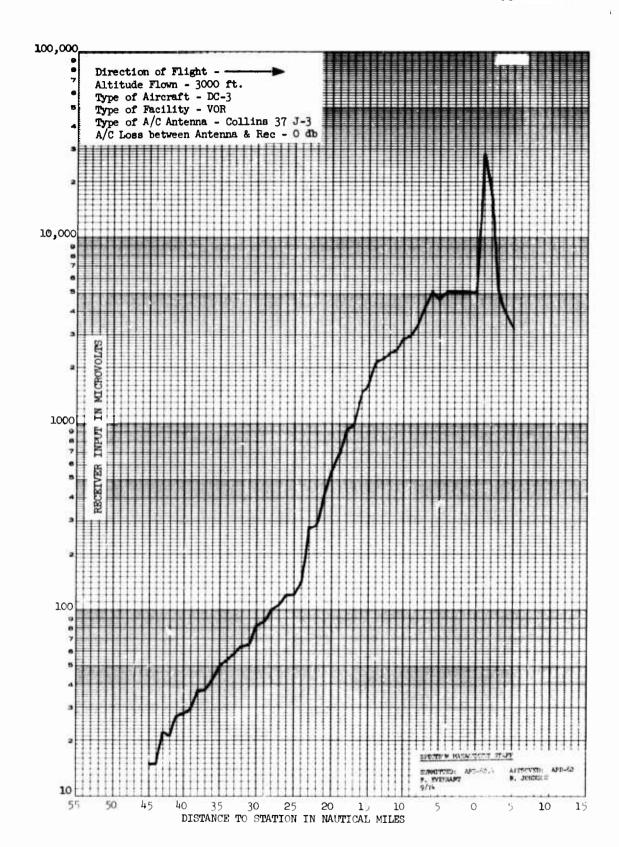
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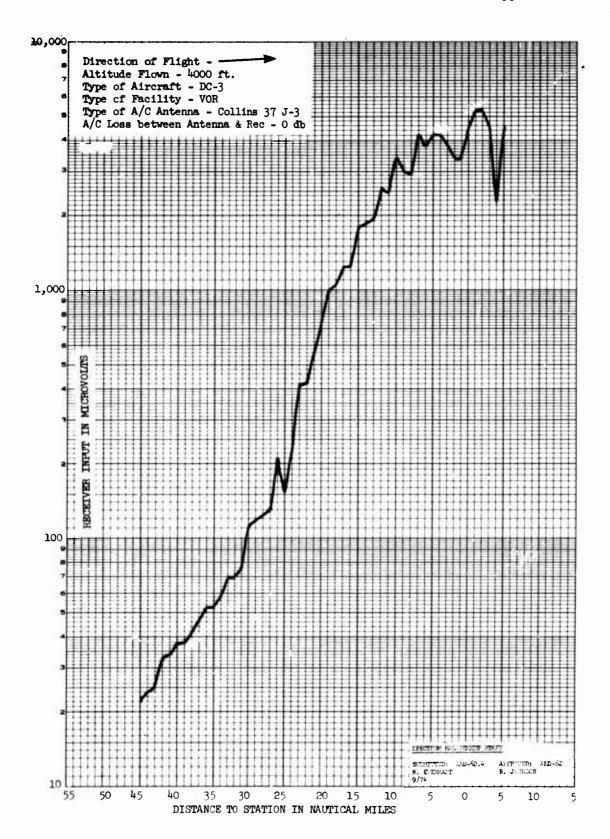
Altitude Flown - 1000 ft.



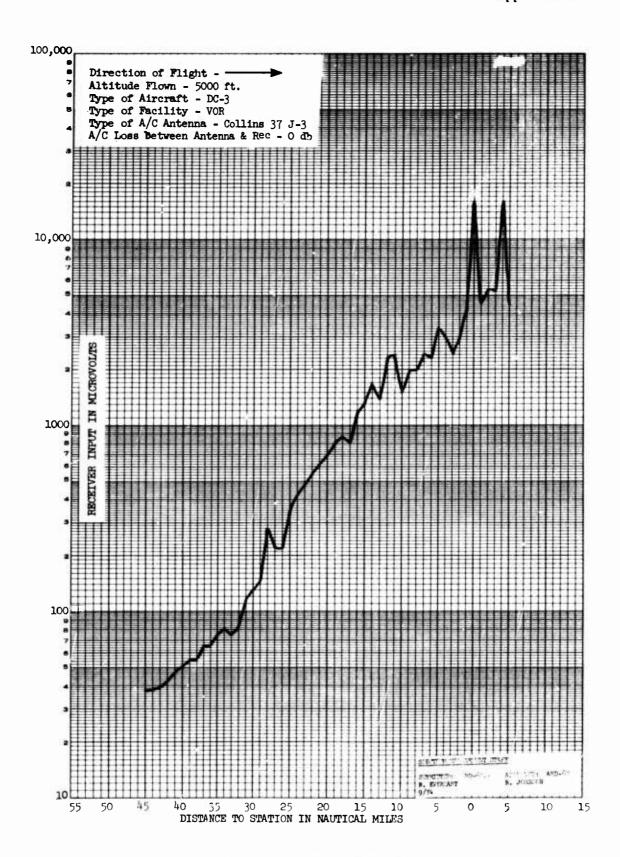
Alcitude Flown - 2000 ft. B-3



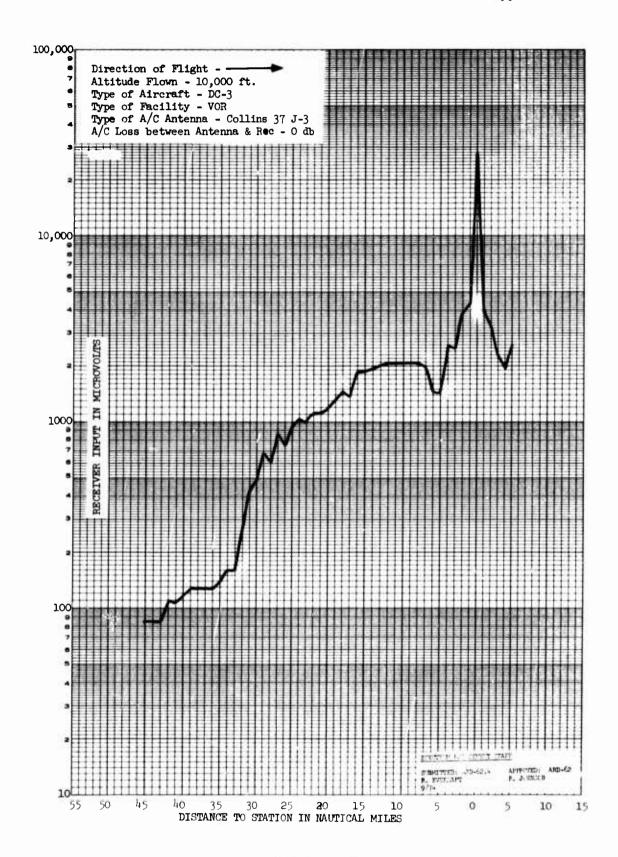
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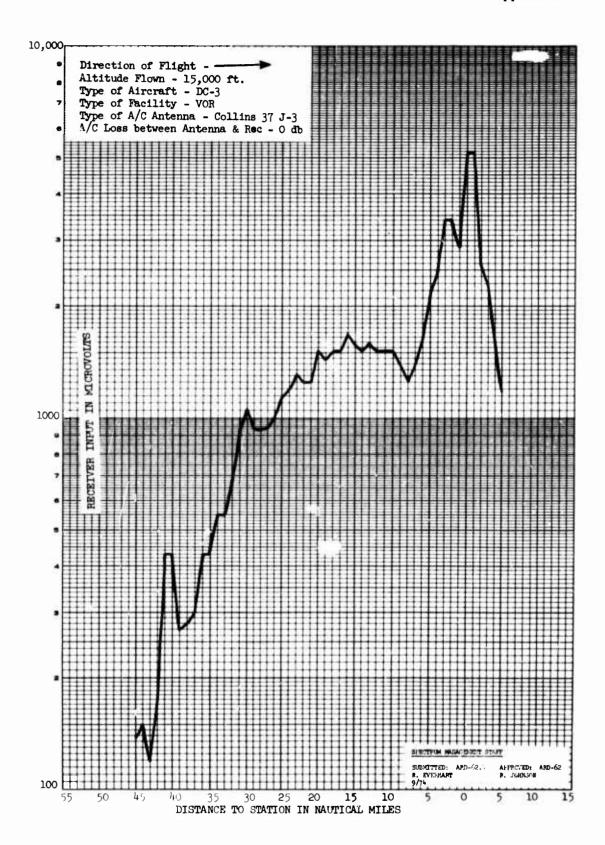
Altitude Flown - 4000 ft.



Altitude Flown - 5000 ft.

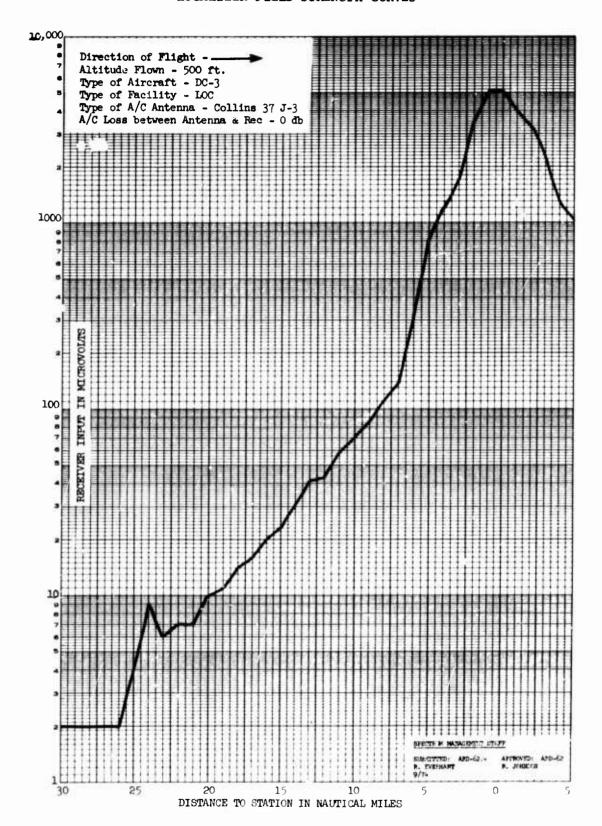


Altitude Flown - 10,000 ft.

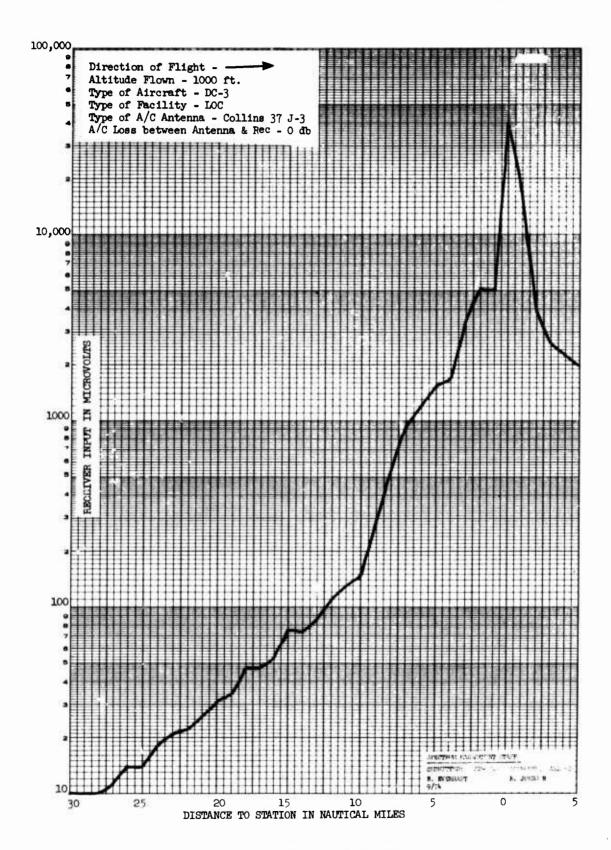


Altitude Flown - 15,000 ft.

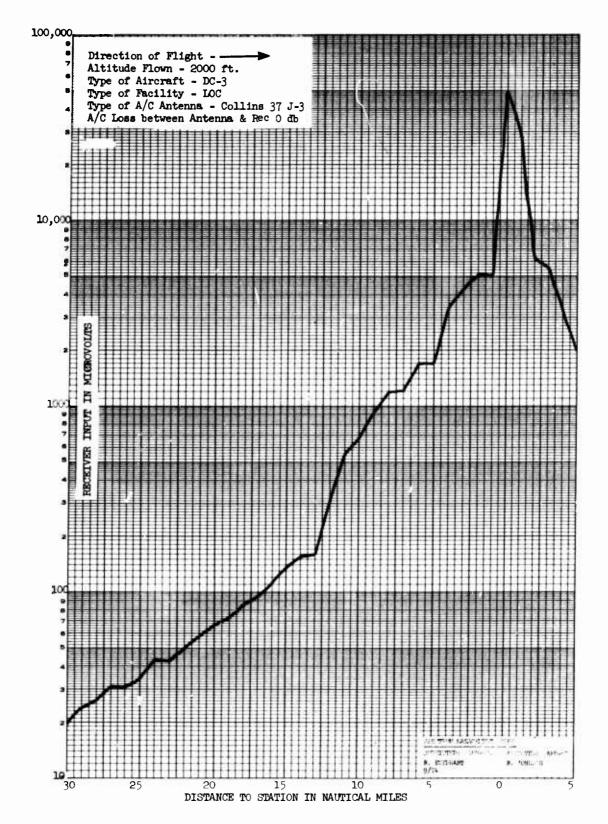
LOCALIZER FIELD STRENGTH CURVES



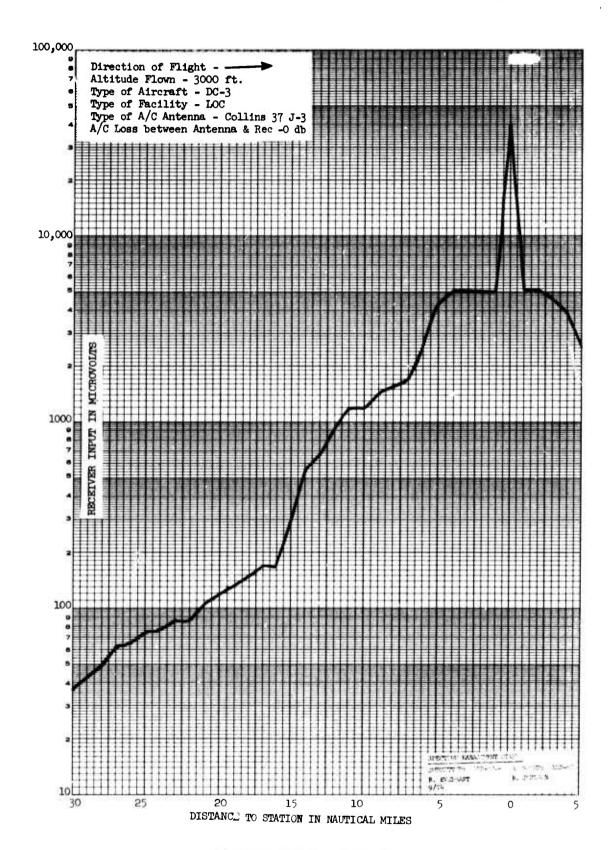
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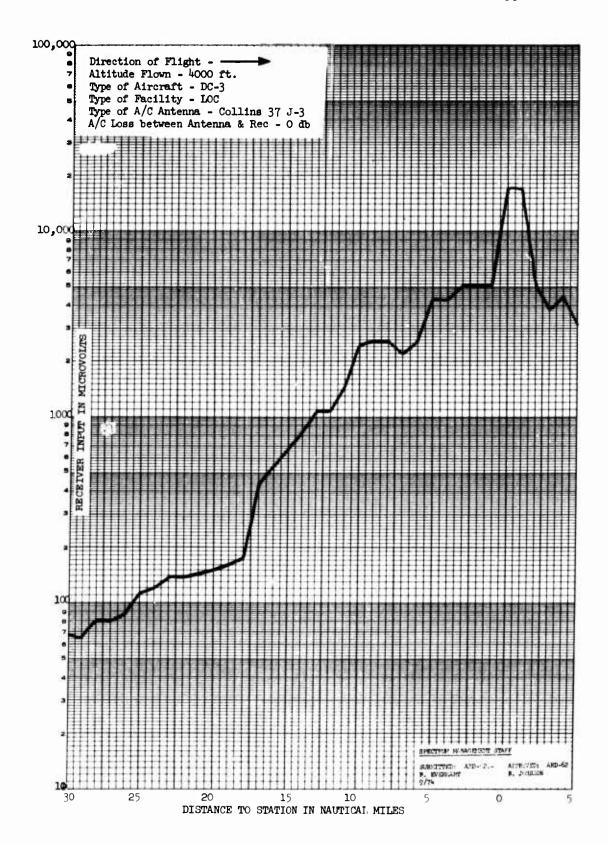
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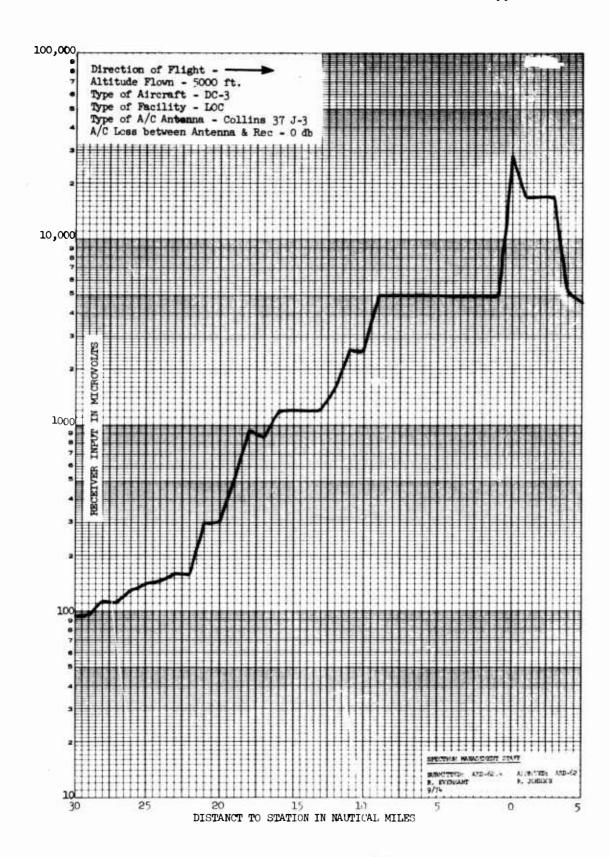
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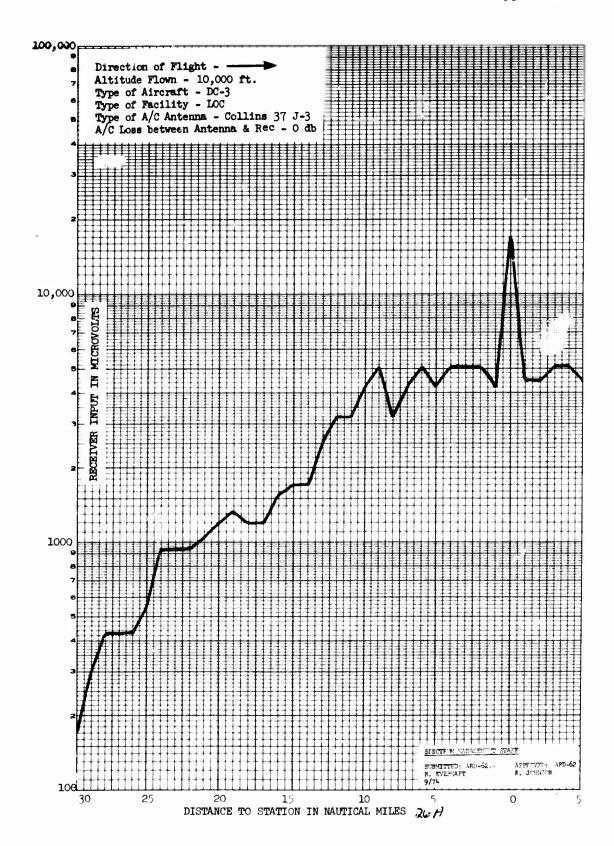
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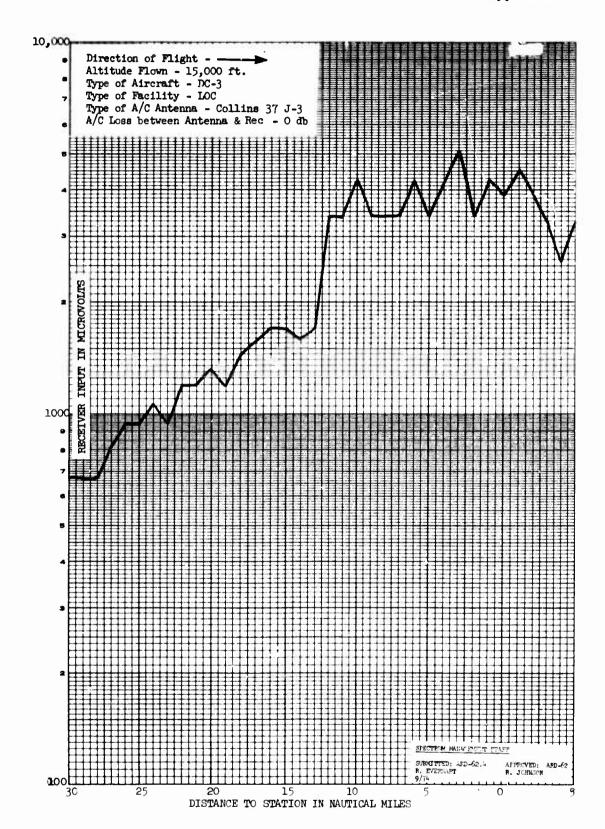
Altitude Flown - 4000 ft.



Altitude Flown - 5000 ft.

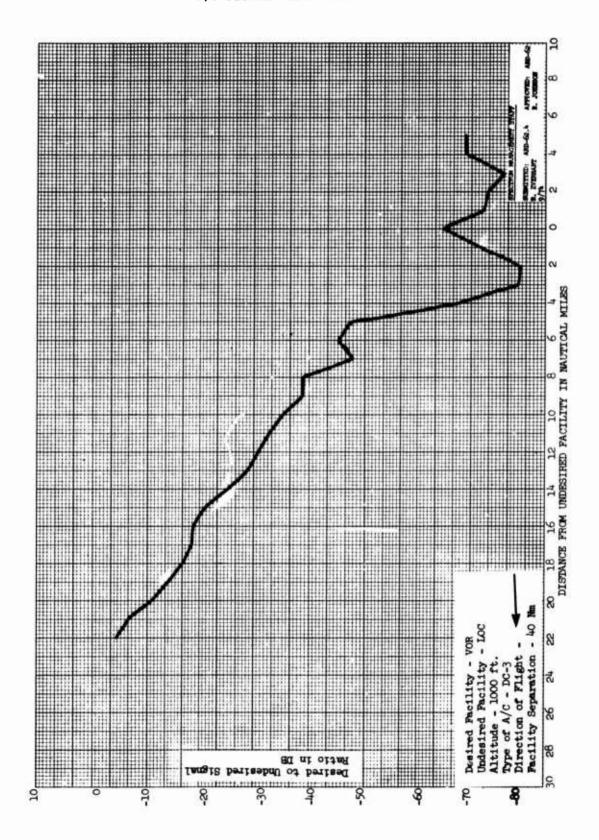


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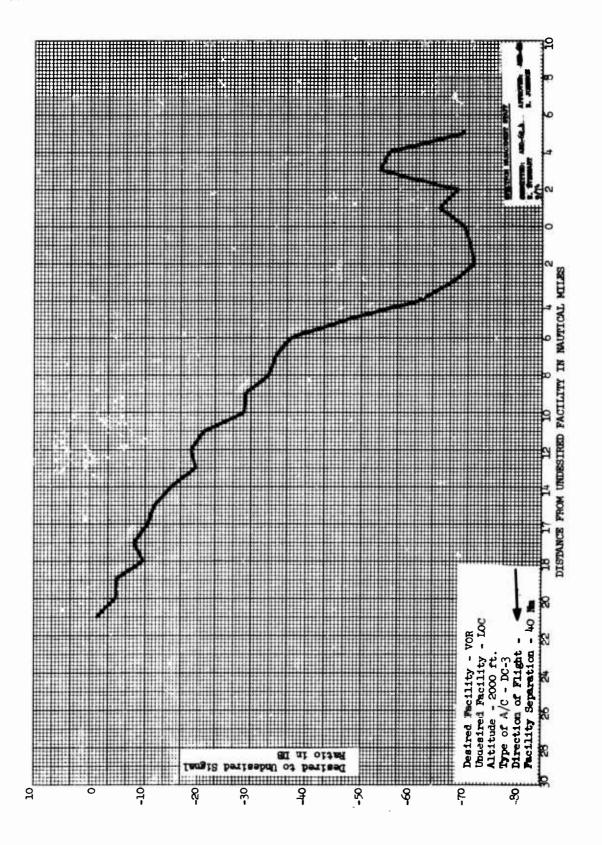


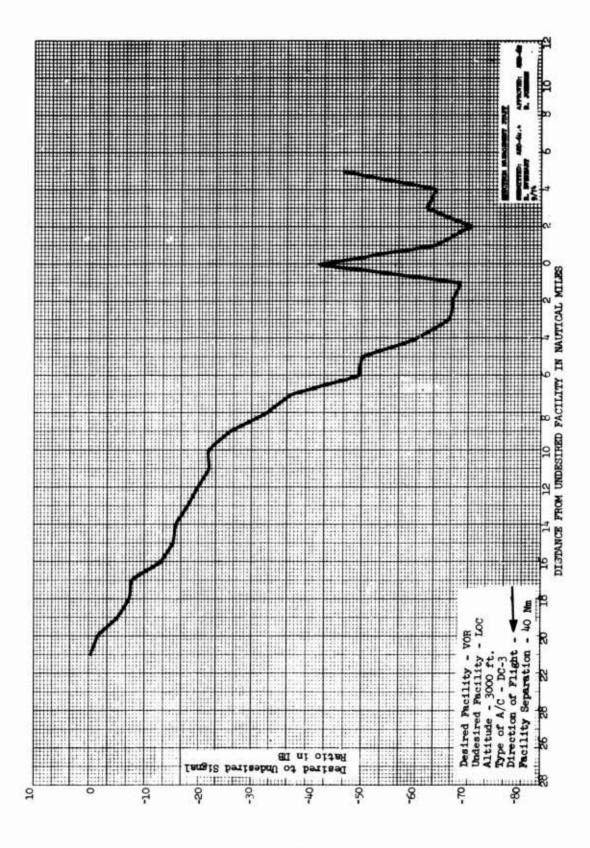
Altitude Flown - 15,000 ft.

D/U SIGNAL RATIO CURVES PHASE I



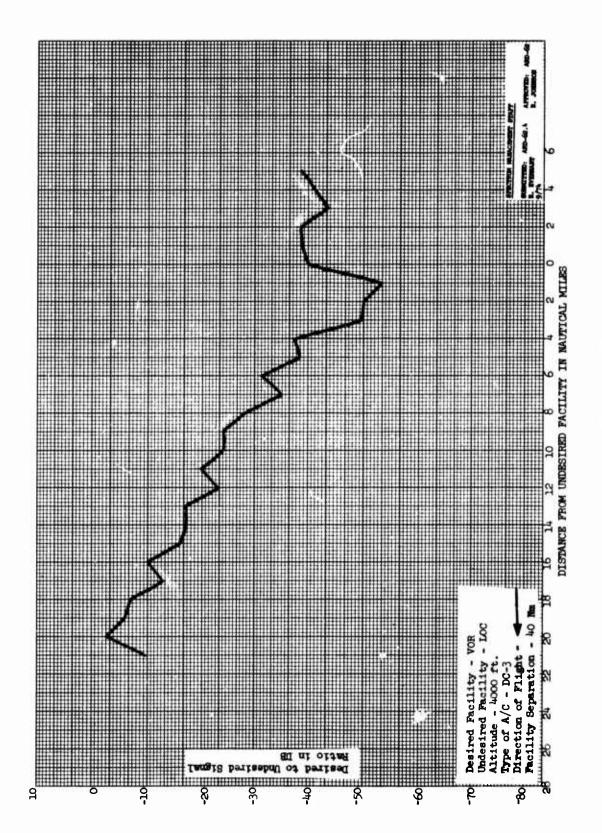
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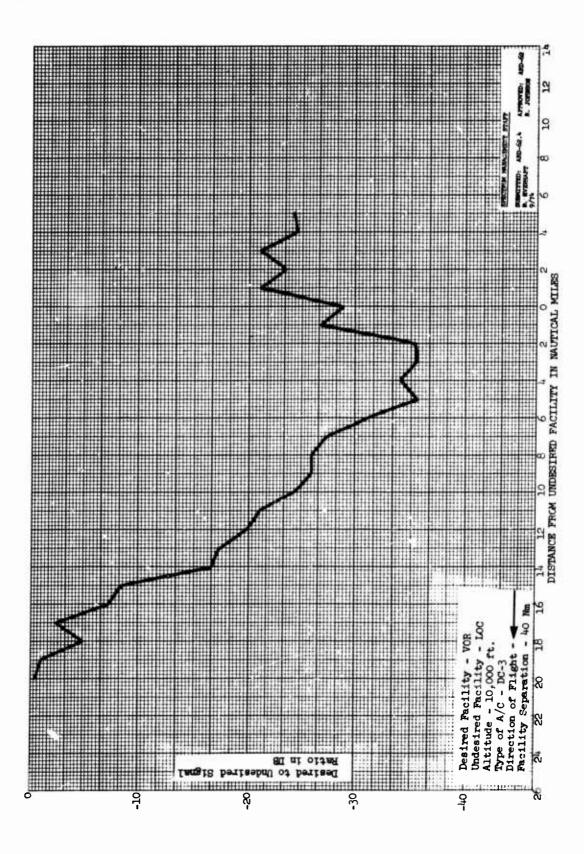




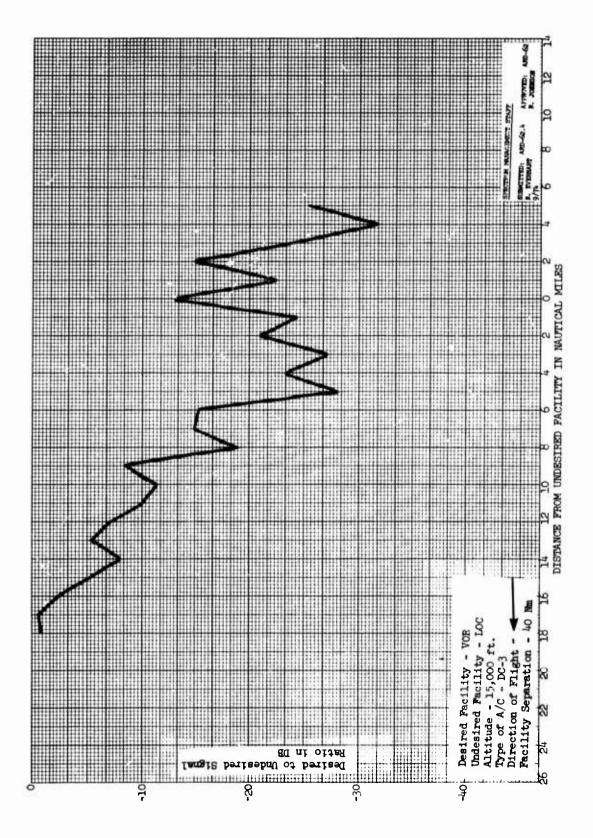
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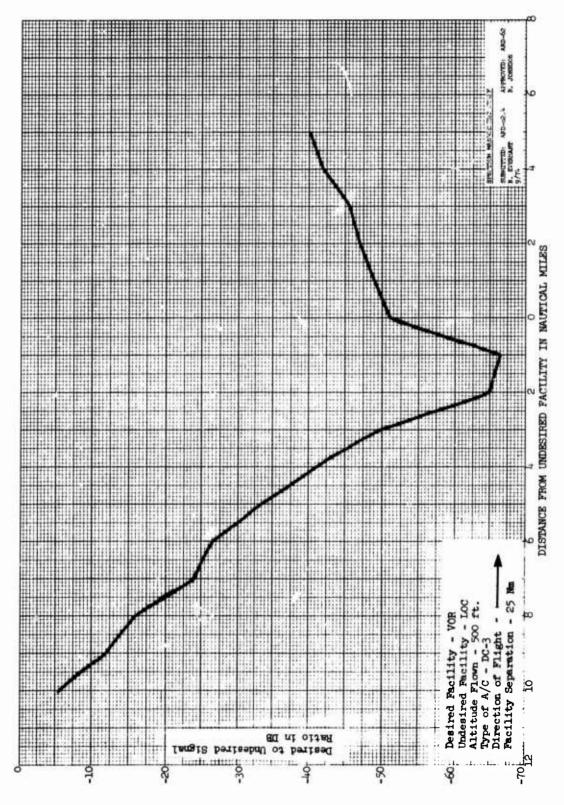




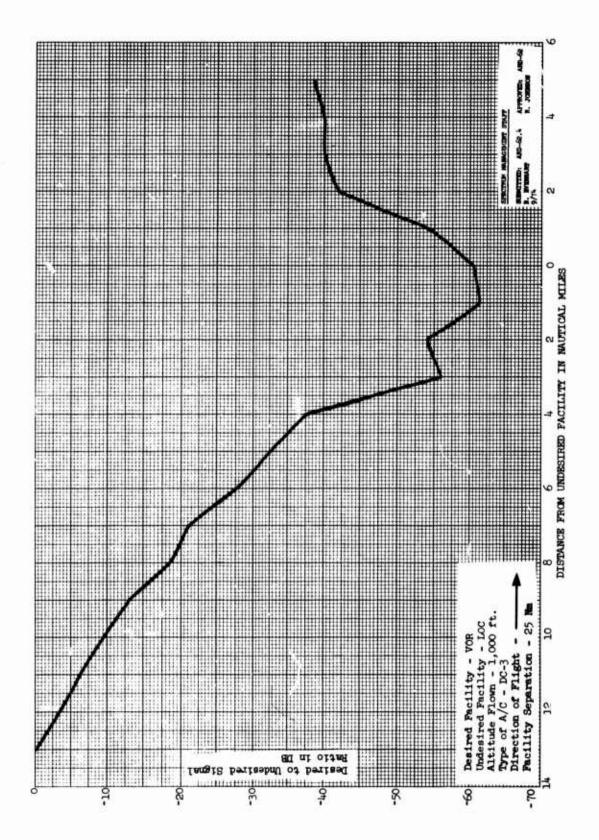


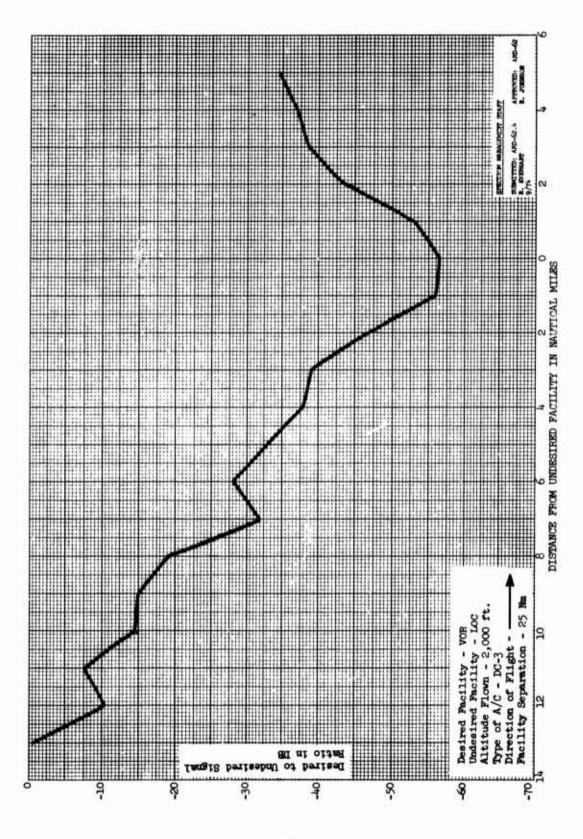
Altitude Flown - 10,000 ft.





ltitude Flown - 500 ft.





Altitude Flown - 2,000 ft.

